****	12/07/103						1 C 1/ U S	02/00107
DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID
17486	53670	CDP100079	29548	65732	NME200487	41609	77793	YPS000357
17487	53671	CDP100080	29549	65733	NME200491	41610	77794	YPS000359
17488	53672	CDP100081	29550	65734	NME200494	41611	77795	YPS000365
17489	53673	CDP100085	29551	65735	NME200495	41612	77796	YPS000377
17490	53674	CDP100086	29552	65736	NME200496	41613	77797	YPS000392
17491	53675	CDP100087	29553	65737	NME200497	41614	77798	YPS000393
17492	53676	CDP100088	29554	65738	NME200499	41615	77799	YPS000400
17493	53677	CDP100089	29555	65739	NME200506	41616	77800	YPS000402
17494	53678	CDP100090	29556	65740	NME200508	41617	77801	YPS000405
17495	53679	CDP100092	29557	65741	NME200510	41618	77802	YPS000409
17496	53680	CDP100097	29558	65742	NME200511	41619	77803	YPS000424
17497	53681	CDP100102	29559	65743	NME200512	41620	77804	YPS000434
17498	53682	CDP100105	29560	65744	NME200513	41621	77805	YPS000441
17499	53683	CDP100108	29561	65745	NME200518	41622	77806	YPS000444
17500	53684	CDP100111	29562	65746	NME200532	41623	77807	YPS000446
17501	53685	CDP100114	29563	65747	NME200544	41624	77808	YPS000449
17502	53686	CDP100115	29564	65748	NME200545	41625	77809	YPS000460
17503	53687	CDP100121	29565	65749	NME200546	41626	77810	YPS000463
17504	53688	CDP100127	29566	65750	NME200552	41627	77811	YPS000466
17505	53689	CDP100129	29567	65751	NME200553	41628	77812	YPS000478
17506	53690	CDP100131	29568	65752	NME200555	41629	77813	YPS000483
17507	53691	CDP100135	29569	65753	NME200558	41630	77814	YPS000489
17508	53692	CDP100137	29570	65754	NME200564	41631	77815	YPS000491
17509	53693	CDP100142	29571	65755	NME200574	41632	77816	YPS000494
17510	53694	CDP100143	29572	65756	NME200576	41633	77817	YPS000496
17511	53695	CDP100145	29573	65757	NME200577	41634	77818	YPS000498
17512	53696	CDP100146	29574	65758	NME200578	41635	77819	YPS000499
17513	53697	CDP100148	29575	65759	NME200581	41636	77820	YPS000502
17514	53698	CDP100150	29576	65760	NME200585	41637	77821	YPS000504
17515	53699	CDP100163	29577	65761	NME200589	41638	77822	YPS000510
17516	53700	CDP100164	29578	65762	NME200590	41639	77823	YPS000522
17517	53701	CDP100166	29579	65763	NME200591	41640	77824	YPS000524
17518	53702	CDP100167	29580	65764	NME200593	41641	77825	YPS000538
17519	53703	CDP100169	29581	65765	NME200596	41642	77826	YPS000541
17520	53704	CDP100170	29582	65766	NME200606	41643	77827	YPS000561
17521	53705	CDP100172	29583	65767	NME200608	41644	77828	YPS000566
17522	53706	CDP100176	29584	65768	NME200611	41645	77829	YPS000578
17523	53707	CDP100180	29585	65769	NME200613	41646	77830	YPS000580
17524	53708	CDP100182	29586	65770	NME200616	41647	77831	YPS000583
17525	53709	CDP100186	29587	65771	NME200622	41648	77832	YPS000584
17526	53710	CDP100193	29588	65772	NME200634	41649	77833	YPS000586
17527	53711	CDP100194	29589	65773	NME200638	41650	77834	YPS000590
17528	53712	CDP100196	29590	65774	NME200649	41651	77835	YPS000599
17529	53713	CDP100199	29591	65775	NME200652	41652	77836	YPS000606
17530	53714	CDP100202	29592	65776	NME200654	41653	77837	YPS000610
17531	53715	CDP100203	29593	65777	NME200657	41654	77838	YPS000612
17532	53716	CDP100213	29594	65778	NME200659	41655	77839	YPS000618
17533	53717	CDP100215	29595	65779	NME200661	41656	77840	YPS000626
17534	53718	CDP100223	29596	65780	NME200667	41657	77841	YPS000639
17535	53719	CDP100224	29597	65781	NME200668	41658	77842	YPS000675
17536	53720	CDP100230	29598	65782	NME200672	41659	77843	YPS000678
17537	53721	CDP100231	29599	65783	NME200676	41660	77844	YPS000682
17538	53722	CDP100242	29600	65784	NME200678	41661	77845	YPS000694
17539	53723	CDP100250	29601 29602	65785	NME200684	41662	77846	YPS000696
17540	53724	CDP100257	29002	65786	NME200699	41663	77847	YPS000703

WO 02/077183				PCT/US02/09107	
	_		-		

DNA	WU	12/0 / / 183						PC 1/050	12/09107
SeqID SeqID SeqID SeqID SeqID SeqID SeqID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
17541 53725	SeqID			SeqID	SeqID		SeqID	SeqID	٠,,
17542 5372	<u> </u>								
17543 53728 CDP100262 29606 65790 NME200707 41666 77850 YPS000724 17545 53729 CDP100263 29607 65791 NME200717 41668 77852 YPS000724 17546 53730 CDP100265 29608 65792 NME200733 41670 77854 YPS000735 17548 53732 CDP100271 29610 65794 NME200733 41670 77854 YPS000756 17548 53733 CDP100271 29610 65794 NME200734 41671 77855 YPS000756 17550 53734 CDP100278 29612 65796 NME200735 41672 77855 YPS000765 17550 53735 CDP100278 29614 65796 NME200735 41673 77857 YPS000765 17555 53735 CDP100282 29614 65796 NME200735 41673 77857 YPS000770 17555 53737 CDP100282 29615 65799 NME200757 41675 77850 YPS000770 17555 53737 CDP100282 29616 65790 NME200764 41674 77854 YPS000773 17555 53739 CDP100290 29617 65801 NME200764 41677 77861 YPS000773 17555 53741 CDP100290 29618 65802 NME200772 41675 77862 YPS000779 17555 53741 CDP100290 29618 65803 NME200772 41679 77861 YPS000779 17555 53744 CDP100305 29620 65804 NME200774 41680 77864 YPS000779 17556 53745 CDP100306 29621 65805 NME200774 41680 77864 YPS000781 17566 53745 CDP100308 29622 65805 NME200784 41682 77866 YPS000781 17566 53745 CDP100313 29625 65809 NME200804 41686 77870 YPS000790 17561 53745 CDP100313 29625 65809 NME200804 41686 77870 YPS000806 17566 53745 CDP100313 29626 65810 NME200804 41686 77870 YPS000806 17566 53745 CDP100313 29626 65810 NME200804 41686 77870 YPS000806 17566 53745 CDP100313 29626 65810 NME200804 41686 77870 YPS000806 17566 53745 CDP100313 29626 65810 NME200804 41686 77870 YPS000806 17566 53750 CDP100313 29626 65810 NME200805 41686 77870 YPS000806 17566 53750 CDP100313 29636 65810 NME200804 41686 77870 YPS000806 17566 53750 CDP100313									
17544 53729									
17545 53730				29605					
17546 53730 CDP100269 29608 65792 NME200732 41669 77853 YPS000756 17548 53732 CDP100271 29610 65794 NME200733 41670 77854 YPS000760 17549 53733 CDP100277 29610 65794 NME200735 41671 77855 YPS000760 17554 53734 CDP100278 29612 65796 NME200735 41672 77855 YPS000765 17551 53735 CDP100278 29613 65796 NME200754 41674 77858 YPS000769 17551 53736 CDP100280 29614 65798 NME200754 41674 77858 YPS000776 17553 53736 CDP100280 29614 65798 NME200754 41674 77858 YPS000771 17553 53736 CDP100282 29615 65799 NME200762 41676 77860 YPS000773 17554 53738 CDP100284 29616 65800 NME200762 41676 77861 YPS000773 17555 53739 CDP100290 29617 65801 NME200769 41678 77862 YPS000776 17555 53740 CDP100293 29618 65802 NME200772 41679 77863 YPS000778 17555 53741 CDP100296 29619 65803 NME200772 41679 77863 YPS000778 17555 53744 CDP100305 29620 65804 NME200783 41681 77865 YPS000781 17556 53744 CDP100308 29622 65806 NME200783 41681 77865 YPS000781 17561 53745 CDP100308 29622 65806 NME200785 41684 77868 YPS000797 17562 53745 CDP100313 29625 65809 NME200804 41686 77870 YPS000805 17566 53749 CDP100313 29625 65800 NME200804 41686 77870 YPS000806 17566 53749 CDP100313 29625 65801 NME200819 41688 77873 YPS000806 17566 53745 CDP100313 29626 65810 NME200814 41687 77871 YPS000806 17566 53750 CDP100313 29626 65810 NME200814 41687 77871 YPS000806 17566 53750 CDP100313 29626 65810 NME200814 41687 77871 YPS000806 17566 53750 CDP100313 29626 65810 NME200817 41687 77871 YPS000806 17565 53755 CDP100349 29636 65810 NME200857 41670 77887 YPS000815 17575 53755 CDP100349 29636 65810 NME200857 41670 77887 YPS000861 17575 53756 CDP100349	17544	53728	CDP100262	29606	65790	NME200707	41667		YPS000724
17547 53731	17545	53729	CDP100263	29607	65791	NME200717	41668	77852	YPS000729
17548 53732	17546	53730	CDP100265	29608	65792	NME200732	41669	77853	YPS000732
17549 53734 CDP100277 29611 65795 NME200735 41672 77856 YPS000765 17551 53735 CDP100279 29613 65797 NME200754 41673 77857 YPS000769 17552 53736 CDP100280 29614 65798 NME200757 41675 77859 YPS000771 17552 53737 CDP100280 29615 65799 NME200762 41676 77860 YPS000773 17554 53738 CDP100284 29616 65800 NME200764 41677 77861 YPS000773 17554 53738 CDP100290 29617 65801 NME200764 41677 77861 YPS000773 17555 53739 CDP100290 29618 65802 NME200769 41679 77863 YPS000776 17557 53741 CDP100293 29619 65803 NME200777 41680 77864 YPS000781 17558 53742 CDP100306 29620 65804 NME200783 416181 77865 YPS000781 17556 53744 CDP100306 29621 65805 NME200785 41681 77866 YPS000787 17556 53745 CDP100306 29622 65806 NME200785 41681 77866 YPS000787 17562 53746 CDP100313 29624 65808 NME200795 41684 77866 YPS000787 17562 53746 CDP100313 29624 65808 NME200800 41685 77869 YPS000797 17563 53745 CDP100313 29624 65808 NME200800 41685 77869 YPS000797 17565 53749 CDP100313 29625 65808 NME200800 41685 77869 YPS000797 17565 53749 CDP100313 29625 65808 NME200800 41685 77869 YPS000806 17566 53750 CDP100331 29626 65810 NME200815 41687 77871 YPS000806 17566 53751 CDP100341 29629 65813 NME200815 41687 77871 YPS000806 17567 53751 CDP100349 29630 65812 NME200837 41698 77873 YPS000815 17576 53753 CDP100349 29630 65814 NME200837 41695 77877 YPS000836 17570 53754 CDP100349 29630 65818 NME200837 41695 77879 YPS000836 17575 53756 CDP100365 29636 65810 NME200857 41695 77879 YPS000836 17575 53756 CDP100365 29636 65810 NME200857 41695 77879 YPS000868 17575 53756 CDP100365 29636 65810 NME200857 41695 77879 YPS000851 17575 53756 CDP100365	17547	53731	CDP100269	29609	65793	NME200733	41670	77854	YPS000756
17550 53734 CDP100278 29612 65796 NME200754 41673 77857 YPS000769 17551 53735 CDP100280 29614 65798 NME200757 41675 77859 YPS000770 17553 53737 CDP100282 29615 65799 NME200762 41675 77860 YPS000773 17553 53738 CDP100284 29616 65800 NME200764 41677 77861 YPS000774 17555 53739 CDP100290 29617 65801 NME200769 41676 77860 YPS000774 17555 53740 CDP100290 29618 65802 NME200772 41679 77863 YPS000776 17556 53740 CDP100290 29618 65802 NME200772 41679 77863 YPS000776 17557 53741 CDP100296 29619 65801 NME200775 41680 77864 YPS000781 17558 53742 CDP100305 29620 65804 NME200773 41681 77865 YPS000781 17558 53744 CDP100306 29621 65805 NME200784 41682 77866 YPS000781 17550 53744 CDP100308 29622 65806 NME200784 41682 77866 YPS000781 17561 53745 CDP100313 29624 65805 NME200785 41684 77867 YPS000780 17562 53746 CDP100313 29624 65808 NME200785 41684 77867 YPS000790 17563 53747 CDP100317 29625 65809 NME200804 41685 77870 YPS000805 17565 53749 CDP100331 29624 65801 NME200804 41686 77870 YPS000805 17565 53749 CDP100331 29624 65810 NME200804 41686 77870 YPS000805 17565 53749 CDP100338 29627 65811 NME200815 41687 77871 YPS000806 17565 53750 CDP100341 29629 65813 NME200804 41689 77873 YPS000815 17566 53750 CDP100341 29629 65813 NME200804 41689 77873 YPS000815 17576 53753 CDP100342 29631 65815 NME200834 41693 77877 YPS000815 17576 53756 CDP100362 29634 65818 NME200834 41693 77877 YPS000815 17575 53756 CDP100362 29634 65818 NME200854 41693 77877 YPS000841 17577 53761 CDP100375 29639 65821 NME200854 41693 77877 YPS000861 17578 53756 CDP100375 29639 65821 NME200857 41700 77884 YPS000851 17578 53756 CDP100375	17548	53732	CDP100271	29610	65794	NME200734	41671	77855	YPS000760
17550 53734 CDP100278 29612 65796 NME200754 41673 77857 YPS000769 17551 53735 CDP100280 29614 65798 NME200757 41675 77859 YPS000770 17553 53737 CDP100282 29615 65799 NME200762 41675 77860 YPS000773 17553 53738 CDP100284 29616 65800 NME200764 41677 77861 YPS000774 17555 53739 CDP100290 29617 65801 NME200769 41676 77860 YPS000774 17555 53740 CDP100290 29618 65802 NME200772 41679 77863 YPS000776 17556 53740 CDP100290 29618 65802 NME200772 41679 77863 YPS000776 17557 53741 CDP100296 29619 65801 NME200775 41680 77864 YPS000781 17558 53742 CDP100305 29620 65804 NME200773 41681 77865 YPS000781 17558 53744 CDP100306 29621 65805 NME200784 41682 77866 YPS000781 17550 53744 CDP100308 29622 65806 NME200784 41682 77866 YPS000781 17561 53745 CDP100313 29624 65805 NME200785 41684 77867 YPS000780 17562 53746 CDP100313 29624 65808 NME200785 41684 77867 YPS000790 17563 53747 CDP100317 29625 65809 NME200804 41685 77870 YPS000805 17565 53749 CDP100331 29624 65801 NME200804 41686 77870 YPS000805 17565 53749 CDP100331 29624 65810 NME200804 41686 77870 YPS000805 17565 53749 CDP100338 29627 65811 NME200815 41687 77871 YPS000806 17565 53750 CDP100341 29629 65813 NME200804 41689 77873 YPS000815 17566 53750 CDP100341 29629 65813 NME200804 41689 77873 YPS000815 17576 53753 CDP100342 29631 65815 NME200834 41693 77877 YPS000815 17576 53756 CDP100362 29634 65818 NME200834 41693 77877 YPS000815 17575 53756 CDP100362 29634 65818 NME200854 41693 77877 YPS000841 17577 53761 CDP100375 29639 65821 NME200854 41693 77877 YPS000861 17578 53756 CDP100375 29639 65821 NME200857 41700 77884 YPS000851 17578 53756 CDP100375	17549	53733	CDP100277	29611	65795	NME200735	41672	77856	YPS000765
17551 53735 CDP100279 29613 65797 NME200754 41674 77858 YPS000770 17552 53736 CDP100282 29614 65798 NME200762 41676 77859 YPS000771 17553 53737 CDP100282 29615 65799 NME200764 41676 77860 YPS000773 17554 53738 CDP100284 29616 65800 NME200764 41677 77861 YPS000776 17555 53739 CDP100293 29618 65801 NME200769 41678 77862 YPS000776 17555 53741 CDP100296 29619 65803 NME200777 41680 77863 YPS000779 17557 53741 CDP100305 29620 65804 NME200777 41680 77864 YPS000781 17558 53742 CDP100305 29621 65805 NME200773 41681 77865 YPS000784 17559 53743 CDP100306 29621 65805 NME200783 41681 77865 YPS000784 17560 53745 CDP100313 29624 65806 NME200795 41684 77866 YPS000790 17561 53745 CDP100313 29624 65808 NME200795 41684 77867 YPS000790 17562 53746 CDP100313 29624 65808 NME200795 41684 77867 YPS000790 17564 53748 CDP100313 29625 65809 NME200804 41685 77877 YPS000805 17564 53748 CDP100338 29627 65811 NME200819 41688 77877 YPS000806 17566 53750 CDP100334 29627 65811 NME200810 41688 77877 YPS000810 17566 53751 CDP100341 29629 65813 NME200820 41689 77873 YPS000810 17567 53754 CDP100349 29631 65815 NME200834 41691 77877 YPS000841 17570 53754 CDP100360 29633 65816 NME200834 41691 77877 YPS000841 17570 53755 CDP100360 29633 65816 NME200834 41691 77878 YPS000843 17570 53756 CDP100360 29633 65816 NME200834 41690 77878 YPS000843 17577 53756 CDP100360 29633 65816 NME200834 41690 77878 YPS000843 17577 53756 CDP100379 29634 65820 NME200853 41690 77884 YPS000864 17577 53756 CDP100375 29636 65820 NME200854 41690 77880 YPS000851 17576 53766 CDP100379 29644 65825 NME200856 41700 77886 YPS000874 17588 53766 CDP100382	17550	53734	CDP100278	29612	65796	NME200748	41673	77857	YPS000769
17552 53736 CDP100280 29614 65798 NME200757 41675 77860 YPS000771 17553 53737 CDP100284 29616 65800 NME200764 41676 77861 YPS000773 17555 53739 CDP100290 29617 65801 NME200769 41678 77861 YPS000774 17555 53740 CDP100296 29619 65802 NME200777 41679 77861 YPS000779 17558 53742 CDP100305 29620 65804 NME200777 41680 77864 YPS000781 17558 53742 CDP100305 29620 65804 NME200777 41680 77864 YPS000781 17558 53743 CDP100308 29621 65805 NME200783 41681 77866 YPS000781 17560 53744 CDP100308 29623 65805 NME200795 41684 77866 YPS000790 17561 53745 CDP100313 29624 65808 NME200809 41684 77866 YPS000790 17563 53747 CDP100317 29625 65809 NME200800 41685 77869 YPS000797 17563 53748 CDP100318 29627 65811 NME200819 41688 77870 YPS000806 17565 53750 CDP100338 29628 65812 NME200819 41688 77872 YPS000806 17566 53750 CDP100348 29629 65813 NME200824 41690 77873 YPS000815 17567 53753 CDP100349 29631 65814 NME200834 41690 77877 YPS000842 17570 53753 CDP100349 29631 65815 NME200834 41690 77877 YPS000842 17571 53755 CDP100366 29633 65816 NME200834 41690 77877 YPS000842 17572 53753 CDP100365 29634 65818 NME200834 41696 77880 YPS000835 17575 53764 CDP100378 29634 65818 NME200834 41697 77877 YPS000842 17577 53756 CDP100378 29634 65825 NME200836 41693 77877 YPS000842 17577 53756 CDP100378 29634 65825 NME200855 41700 77881 YPS000851 17575 53766 CDP100378 29634 65825 NME200857 41700 77881 YPS000861 17578 53766 CDP100378 29634 65825 NME200856 41700 77884 YPS000851 17578 53766 CDP100378 29644 65825 NME200856 41700 77884 YPS000868 17579 53766 CDP100388 29646 65820 NME200857 41700 77									
17553 53738 CDP100284 29615 65799 NME200762 41676 77860 YPS000773 17554 53738 CDP100294 29616 65800 NME200769 41678 77862 YPS000776 17555 53739 CDP100290 29617 65801 NME200772 41679 77863 YPS000776 17557 53741 CDP100296 29619 65803 NME200777 41680 77864 YPS000781 17558 53742 CDP100305 29620 65804 NME200783 41681 77865 YPS000781 17559 53743 CDP100306 29621 65805 NME200783 41681 77865 YPS000781 17560 53744 CDP100309 29622 65806 NME200783 41681 77867 YPS000790 17561 53745 CDP100309 29623 65806 NME200795 41684 77866 YPS000790 17562 53746 CDP100313 29624 65806 NME200795 41684 77867 YPS000790 17562 53746 CDP100313 29624 65809 NME200804 41685 77869 YPS000790 17564 53748 CDP100312 29625 65809 NME200804 41686 7787 YPS000806 17565 53749 CDP100338 29627 65811 NME200815 41687 77871 YPS000806 17566 53750 CDP100334 29628 65812 NME200820 41688 77873 YPS000810 17567 53751 CDP100341 29629 65813 NME200824 41690 77873 YPS000815 17568 53752 CDP100349 29631 65814 NME200824 41691 77875 YPS000836 17570 53754 CDP100352 29633 65815 NME200834 41690 77874 YPS000836 17575 53756 CDP100362 29633 65816 NME200847 41696 77876 YPS000843 17572 53756 CDP100362 29634 65812 NME200854 41699 77876 YPS000843 17575 53760 CDP100379 29631 65821 NME200854 41699 77880 YPS000845 17578 53760 CDP100379 29631 65821 NME200854 41699 77880 YPS000845 17577 53760 CDP100379 29634 65824 NME200854 41699 77880 YPS000861 17578 53760 CDP100378 29643 65824 NME200854 41699 77880 YPS000861 17578 53760 CDP100378 29646 65824 NME200857 41700 77880 YPS000861 17588 53760 CDP100388 29646 65824 NME200879 41700 77890 YPS000890 17588 53770 CDP100389 2									
17554 33738 CDP100284 29616 65800 NME200764 41677 77861 YPS000776 17555 53739 CDP100290 29617 65801 NME200772 41679 77863 YPS000779 17557 53741 CDP100296 29619 65803 NME200777 41680 77863 YPS000779 17557 53741 CDP100306 29621 65803 NME200784 41681 77865 YPS000784 17558 53742 CDP100306 29621 65805 NME200784 41681 77865 YPS000784 17560 53744 CDP100308 29622 65804 NME200784 41682 77866 YPS000787 17561 53745 CDP100313 29624 65807 NME200785 41683 77867 YPS000792 17562 53746 CDP100313 29624 65807 NME200800 41685 77869 YPS000792 17563 53747 CDP100317 29625 65809 NME200800 41685 77869 YPS000797 17563 53748 CDP100317 29625 65801 NME200816 41687 77871 YPS000806 17566 53749 CDP100338 29627 65811 NME200819 41688 77871 YPS000806 17566 53750 CDP100331 29628 65812 NME200820 41689 77873 YPS000810 17567 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53753 CDP100348 29630 65814 NME200836 41690 77874 YPS000815 17576 53753 CDP100352 29632 65815 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65815 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29634 65818 NME200834 41690 77887 YPS000842 17577 53758 CDP100371 29637 65821 NME200854 41697 77881 YPS000845 17577 53758 CDP100371 29637 65821 NME200854 41697 77881 YPS000866 17579 53761 CDP100371 29637 65821 NME200854 41697 77881 YPS000861 17578 53760 CDP100373 29636 65820 NME200855 41697 77881 YPS000861 17578 53760 CDP100371 29637 65821 NME200854 41697 77881 YPS000861 17578 53760 CDP100378 29644 65825 NME200857 41701 77884 YPS000861 17578 53760 CDP100388 29644 65825 NME200870 41700 77884 YPS000870 17584 53760 CDP100389									
17555 53739									
17556 53740 CDP100295 29618 65802 NME200777 41679 77863 YPS000781									
17557 53741 CDP100296 29619 65803 NME200777 41680 77864 YPS000781 17558 53742 CDP100305 29620 65804 NME200783 41681 77865 YPS000784 17559 53743 CDP100308 29621 65805 NME200785 41683 77866 YPS000787 17561 53744 CDP100308 29622 65806 NME200785 41683 77867 YPS000790 17561 53745 CDP100309 29623 65807 NME200795 41684 77868 YPS000792 17562 53746 CDP100313 29624 65808 NME200804 41685 77869 YPS000797 17563 53748 CDP100317 29625 65809 NME200804 41686 77870 YPS000805 17564 53748 CDP100325 29626 65810 NME200815 41687 77871 YPS000806 17565 53749 CDP100338 29627 65811 NME200815 41689 77873 YPS000809 17566 53750 CDP100341 29629 65813 NME200820 41689 77873 YPS000815 17568 53752 CDP100348 29630 65814 NME200821 41690 77875 YPS000834 17569 53753 CDP100349 29631 65815 NME200834 41692 77876 YPS000842 17570 53754 CDP100360 29633 65816 NME200834 41692 77877 YPS000842 17571 53755 CDP100360 29633 65816 NME200834 41693 77877 YPS000842 17573 53755 CDP100360 29633 65816 NME200834 41693 77877 YPS000843 17573 53755 CDP100365 29636 65820 NME200857 41696 77880 YPS000846 17578 53758 CDP100375 29636 65820 NME200854 41695 77889 YPS000846 17578 53765 CDP100375 29639 65823 NME200854 41698 77882 YPS000851 17578 53765 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17584 53766 CDP100378 29644 65824 NME200857 41701 77884 YPS000861 17584 53766 CDP100378 29644 65825 NME200857 41701 77884 YPS000861 17584 53766 CDP100378 29646 65826 NME200867 41700 77884 YPS000861 17585 53760 CDP100378 29646 65826 NME200867 41700 77884 YPS000861 17588 53760 CDP100388 29646 65826 NME200867 41700 77889 YPS000869 17584 53766 CDP100388									
17558 53742 CDP100306 29621 65804 NME200783 41681 77865 YPS000784 17559 53743 CDP100306 29621 65805 NME200785 41682 77866 YPS000787 17561 53745 CDP100309 29623 65807 NME200785 41683 77867 YPS000792 17562 53746 CDP100313 29624 65808 NME200800 41685 77869 YPS000797 17562 53746 CDP100313 29625 65809 NME200800 41685 77869 YPS000797 17564 53748 CDP100315 29626 65801 NME200815 41687 77871 YPS000805 17564 53748 CDP100338 29627 65811 NME200815 41687 77871 YPS000806 17565 53749 CDP100338 29627 65811 NME200819 41688 77872 YPS000809 17567 53751 CDP100341 29629 65813 NME200820 41689 77873 YPS000810 17568 53752 CDP100342 29630 65814 NME200821 41690 77874 YPS000815 17568 53753 CDP100342 29630 65814 NME200824 41691 77875 YPS000834 17570 53754 CDP100352 29632 65816 NME200834 41692 77876 YPS000842 17571 53755 CDP100360 29633 65817 NME200834 41694 77878 YPS000843 17573 53757 CDP100363 29635 65819 NME200847 41696 77879 YPS000843 17574 53758 CDP100363 29636 65820 NME200854 41697 77881 YPS000846 17577 53760 CDP100373 29638 65822 NME200854 41699 77881 YPS000851 17578 53760 CDP100373 29638 65822 NME200854 41699 77881 YPS000851 17578 53760 CDP100373 29638 65822 NME200854 41699 77881 YPS000851 17578 53763 CDP100373 29638 65822 NME200854 41699 77883 YPS000851 17578 53766 CDP100373 29638 65822 NME200854 41699 77881 YPS000851 17578 53766 CDP100375 29646 65826 NME200857 41701 77886 YPS000861 17588 53766 CDP100375 29646 65826 NME200870 41705 77889 YPS000871 17585 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17588 53766 CDP10038 29646 65828 NME200870 41705 77889 YPS000890 17586 53776 CDP100404 2									
17559 53743 CDP100306 29621 65805 NME200784 41682 77866 YPS000787 17560 53744 CDP100308 29622 65806 NME200785 41684 77868 YPS000790 17562 53746 CDP100303 29624 65808 NME200800 41685 77869 YPS000797 17563 53747 CDP100317 29625 65809 NME200804 41686 77870 YPS000805 17564 53748 CDP100325 29626 65810 NME200815 41687 77871 YPS000806 17565 53749 CDP100338 29627 65811 NME200819 41688 77872 YPS000806 17565 53750 CDP100339 29628 65812 NME200820 41689 77873 YPS000810 17565 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53753 CDP100342 29631 65815 NME200824 41691 77875 YPS000836 17570 53754 CDP100352 29632 65816 NME200834 41692 77876 YPS000836 17570 53755 CDP100362 29632 65816 NME200834 41692 77876 YPS000831 17572 53756 CDP100362 29632 65816 NME200837 41694 77878 YPS000842 17571 53755 CDP100362 29634 65818 NME200847 41695 77879 YPS000842 17573 53755 CDP100362 29636 65819 NME200847 41696 77880 YPS000845 17575 53759 CDP100372 29637 65821 NME200854 41698 77881 YPS000846 17576 53760 CDP100373 29637 65821 NME200854 41699 77881 YPS000851 17576 53760 CDP100373 29638 65822 NME200855 41700 77884 YPS000867 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000867 17585 53766 CDP100382 29644 65828 NME200856 41700 77884 YPS000867 17585 53766 CDP100382 29644 65828 NME200857 41701 77885 YPS000867 17585 53766 CDP100382 29644 65828 NME200857 41701 77886 YPS000867 17585 53766 CDP100382 29646 65820 NME200870 41705 77889 YPS000871 17585 53766 CDP100382 29646 65820 NME200870 41704 77884 YPS000870 17588 53766 CDP100388 29646 65830 NME200870 41707 77891 YPS000890 17588 53776 CDP100404									
17560 53744 CDP100308 29622 65806 NME200785 41683 77867 YPS000790 17561 53745 CDP100313 29624 65807 NME200790 41684 77868 YPS000797 17563 53747 CDP100317 29625 65809 NME200804 41685 77870 YPS000797 17563 53747 CDP100317 29625 65809 NME200804 41686 77870 YPS000805 17564 53748 CDP100325 29626 65810 NME200815 41687 77871 YPS000806 17566 53749 CDP100338 29627 65811 NME200819 41688 77872 YPS000809 17566 53750 CDP100339 29628 65812 NME200820 41689 77873 YPS000810 17567 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17569 53753 CDP100349 29631 65814 NME200824 41691 77875 YPS000834 17569 53753 CDP100349 29631 65815 NME200836 41693 77877 YPS000836 17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000843 17572 53756 CDP100360 29633 65817 NME200847 41695 77878 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77878 YPS000843 17573 53757 CDP100362 29636 65820 NME200849 41696 77880 YPS000846 17576 53760 CDP100371 29637 65821 NME200855 41699 77881 YPS000851 17576 53760 CDP100375 29639 65823 NME200855 41699 77884 YPS000861 17578 53766 CDP100375 29639 65823 NME200855 41700 77884 YPS000861 17588 53766 CDP100382 29644 65825 NME200856 41700 77884 YPS000861 17585 53766 CDP100385 29644 65825 NME200857 41701 77885 YPS000861 17585 53760 CDP100385 29644 65825 NME200857 41701 77886 YPS000861 17585 53766 CDP100385 29644 65825 NME200857 41701 77880 YPS000870 17585 53766 CDP100385 29644 65828 NME200867 41700 77880 YPS000870 17585 53776 CDP100385 29644 65828 NME200870 41705 77889 YPS000870 17585 53776 CDP100385 29644 65828 NME200870 41706 77890 YPS000990 17585 53776 CDP100404			1						
17561 53745 CDP100309 29623 65807 NME200795 41684 77868 YPS000792 17562 53746 CDP100313 29624 65808 NME200800 41685 77869 YPS000797 17563 53747 CDP100312 29626 65810 NME200815 41687 77871 YPS000806 17564 53749 CDP100338 29627 65811 NME200819 41688 77872 YPS000809 17566 53749 CDP100339 29628 65812 NME200819 41688 77873 YPS000809 17566 53750 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53752 CDP100348 29630 65814 NME200821 41690 77874 YPS0008315 17569 53753 CDP100349 29631 65815 NME200834 41691 77875 YPS000834 17570 53755 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000842 17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000843 17575 53758 CDP100365 29636 65820 NME200854 41695 77889 YPS000846 17574 53758 CDP100365 29636 65820 NME200854 41697 77881 YPS000851 17575 53750 CDP100373 29637 65821 NME200854 41697 77881 YPS000851 17576 53760 CDP100373 29638 65822 NME200854 41698 77882 YPS000851 17578 53760 CDP100375 29639 65823 NME200854 41698 77882 YPS000851 17578 53760 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53760 CDP100378 29640 65824 NME200857 41701 77885 YPS000861 17588 53760 CDP100382 29641 65825 NME200857 41701 77886 YPS000861 17585 53766 CDP100382 29644 65824 NME200857 41701 77886 YPS000861 17588 53760 CDP100388 29644 65828 NME200870 41705 77889 YPS000870 17585 53766 CDP100388 29646 65830 NME200870 41705 77889 YPS000870 17585 53776 CDP100400 29649 65833 NME200870 41707 77891 YPS000900 17588 53776 CDP100400 29649 65833 NME200897 41710 77894 YPS000900 17588 53776 CDP100400									
17562 53746 CDP100313 29624 65808 NME200800 41685 77869 YPS000797 17563 53747 CDP100317 29625 65809 NME200804 41686 77870 YPS000806 17565 53748 CDP100325 29626 65810 NME200815 41687 77871 YPS000806 17565 53749 CDP100338 29627 65811 NME200819 41688 77872 YPS000809 17566 53750 CDP100339 29628 65812 NME200820 41689 77873 YPS000810 17567 53751 CDP100348 29629 65813 NME200821 41690 77874 YPS000815 17568 53752 CDP100348 29630 65814 NME200824 41691 77875 YPS000834 17569 53753 CDP100349 29631 65815 NME200834 41692 77876 YPS000836 17570 53754 CDP100352 29632 65816 NME200834 41692 77876 YPS000836 17572 53755 CDP100360 29633 65817 NME200834 41693 77877 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77878 YPS000843 17573 53757 CDP100362 29634 65818 NME200847 41695 77878 YPS000845 17575 53758 CDP100362 29636 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100371 29637 65821 NME200853 41697 77881 YPS000851 17576 53760 CDP100373 29638 65822 NME200855 41699 77881 YPS000851 17578 53760 CDP100373 29638 65822 NME200856 41700 77884 YPS000861 17578 53760 CDP100378 29640 65824 NME200856 41700 77884 YPS000861 17580 53764 CDP100378 29640 65824 NME200856 41700 77885 YPS000863 17580 53764 CDP100382 29640 65824 NME200856 41700 77885 YPS000861 17585 53766 CDP100382 29644 65825 NME200856 41700 77885 YPS000868 17581 53765 CDP100382 29644 65825 NME200857 41700 77885 YPS000872 17584 53768 CDP100388 29646 65820 NME200870 41704 77885 YPS000874 17585 53766 CDP100382 29645 65820 NME200870 41704 77885 YPS000874 17585 53766 CDP100388 29646 65823 NME200870 41704 77895 YPS000890 17585 53776 CDP100409									
17563 53747 CDP100317 29625 65809 NME200804 41686 77870 YPS000805 17564 53748 CDP100325 29626 65810 NME200815 41687 77871 YPS000806 17565 53749 CDP100338 29627 65811 NME200820 41688 77872 YPS000809 17566 53750 CDP100339 29628 65812 NME200820 41689 77873 YPS000810 17567 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53752 CDP100348 29630 65814 NME200824 41691 77875 YPS000836 17570 53754 CDP100352 29631 65815 NME200834 41692 77876 YPS000836 17570 53754 CDP100352 29632 65816 NME200834 41692 77876 YPS000836 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000842 17573 53755 CDP100360 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200847 41695 77879 YPS000846 17574 53758 CDP100365 29636 65820 NME200853 41696 77880 YPS000864 17576 53759 CDP100371 29637 65821 NME200853 41696 77880 YPS000851 17575 53761 CDP100373 29638 65822 NME200853 41699 77883 YPS000851 17578 53760 CDP100373 29638 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100379 29641 65825 NME200856 41700 77884 YPS000861 17578 53764 CDP100379 29641 65825 NME200856 41700 77884 YPS000863 17580 53764 CDP100382 29642 65826 NME200866 41700 77884 YPS000868 17580 53766 CDP100383 29644 65828 NME200866 41700 77884 YPS000868 17585 53766 CDP100385 29646 65824 NME200866 41700 77886 YPS000868 17585 53766 CDP100385 29644 65828 NME200866 41700 77889 YPS000870 17585 53766 CDP100388 29646 65828 NME200870 41700 77889 YPS000870 17585 53766 CDP100386 29646 65828 NME200870 41700 77891 YPS000870 17585 53766 CDP100388 29646 65830 NME200879 41700 77891 YPS000890 17588 53772 CDP100404									
17564 53748 CDP100325 29626 65810 NME200815 41687 77871 YPS000806 17565 53749 CDP100338 29627 65811 NME200819 41688 77872 YPS000809 17566 53750 CDP100339 29628 65812 NME200820 41689 77873 YPS000810 17567 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53752 CDP100348 29630 65814 NME200824 41691 77875 YPS000834 17569 53753 CDP100349 29631 65815 NME200834 41692 77876 YPS000834 17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41697 77881 YPS000851 17576 53760 CDP100373 29636 65822 NME200854 41698 77882 YPS000851 17576 53760 CDP100373 29639 65823 NME200855 41699 77883 YPS000851 17579 53761 CDP100378 29640 65824 NME200857 41701 77885 YPS000864 17588 53764 CDP100378 29640 65824 NME200856 41700 77884 YPS000864 17580 53766 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100378 29640 65824 NME200857 41701 77885 YPS000866 17582 53766 CDP100385 29644 65825 NME200856 41700 77884 YPS000866 17582 53766 CDP100385 29644 65825 NME200857 41701 77885 YPS000866 17582 53766 CDP100385 29646 65826 NME200857 41701 77885 YPS000866 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000870 17584 53768 CDP100385 29646 65830 NME200870 41705 77889 YPS000870 17585 53766 CDP100386 29647 65831 NME200879 41705 77891 YPS000890 17586 53776 CDP100404 29650 65834 NME200893 41714 77894 YPS000900 17580 53776 CDP100409									
17565 53749 CDP100338 29627 65811 NME200819 41688 77872 YPS000809 17566 53750 CDP100339 29628 65812 NME200820 41689 77873 YPS000810 17567 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53752 CDP100348 29630 65814 NME200824 41691 77875 YPS000836 17569 53753 CDP100349 29631 65815 NME200834 41692 77876 YPS000836 17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100365 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100378 29640 65824 NME200856 41700 77884 YPS000861 17578 53763 CDP100379 29641 65825 NME200858 41700 77884 YPS000861 17588 53764 CDP100382 29642 65826 NME200858 41700 77886 YPS000868 17581 53765 CDP100382 29642 65826 NME200851 41701 77885 YPS000868 17581 53766 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17582 53766 CDP100382 29644 65828 NME200870 41705 77889 YPS000871 17585 53766 CDP100387 29645 65829 NME200871 41706 77890 YPS000871 17585 53766 CDP100382 29644 65828 NME200870 41705 77889 YPS000871 17585 53766 CDP100382 29645 65830 NME200870 41705 77889 YPS000870 17586 53770 CDP100400 29649 65831 NME200879 41707 77891 YPS000894 17587 53774 CDP100409 29652 65836 NME200897 41707 77891 YPS000990 17591 53775 CDP100409 29655 65836 NME200897 41710 77894 YPS000990 17591 53776 CDP100410									
17566 53750 CDP100339 29628 65812 NME200820 41689 77873 YPS000810 17567 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53752 CDP100348 29630 65814 NME200824 41691 77875 YPS000834 17569 53753 CDP100349 29631 65815 NME200834 41692 77876 YPS000834 17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100360 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100365 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100375 29639 65823 NME200855 41699 77883 YPS000857 17578 53762 CDP100378 29640 65824 NME200856 41700 77884 YPS000861 17578 53763 CDP100379 29641 65825 NME200856 41700 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200856 41700 77886 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41704 77888 YPS000868 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17585 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17585 53766 CDP100387 29645 65820 NME200870 41705 77890 YPS000871 17585 53766 CDP100389 29644 65828 NME200870 41705 77890 YPS000870 17585 53776 CDP100400 29649 65831 NME200870 41705 77891 YPS000894 17587 53775 CDP100409 29655 65836 NME200897 41700 77891 YPS000990 17590 53774 CDP100409 29652 65836 NME200897 41710 77894 YPS000990 17591 53775 CDP100410 29653 65837 NME200897 41711 77896 YPS000990 17591 53776 CDP100410			9						
17567 53751 CDP100341 29629 65813 NME200821 41690 77874 YPS000815 17568 53752 CDP100348 29630 65814 NME200824 41691 77875 YPS000834 17569 53753 CDP100349 29631 65815 NME200834 41692 77876 YPS000836 17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100365 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100378 29640 65824 NME200856 41700 77884 YPS000861 17580 53764 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53766 CDP100382 29642 65826 NME200858 41702 77886 YPS000868 17581 53765 CDP100382 29642 65826 NME200866 41704 77888 YPS000868 17582 53766 CDP100383 29643 65827 NME200866 41704 77888 YPS000870 17582 53766 CDP100388 29644 65828 NME200870 41705 77889 YPS000871 17585 53769 CDP100388 29646 65830 NME200873 41706 77890 YPS000872 17586 53770 CDP100399 29648 65831 NME200873 41707 77891 YPS000894 17587 53771 CDP100409 29653 65835 NME200887 41710 77894 YPS000909 17590 53774 CDP100409 29652 65836 NME200897 41710 77894 YPS000909 17591 53775 CDP100404 29653 65837 NME200897 41715 77899 YPS000909 17590 53776 CDP100414 29653 65837 NME200899 41714 77896 YPS000909 17592 53776 CDP100417 29655 65830 NME200899 41714 77896 YPS000909 17594 53778 CDP100418									
17568 53752 CDP100348 29630 65814 NME200824 41691 77875 YPS000834 17569 53753 CDP100349 29631 65815 NME200836 41692 77876 YPS000836 17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100365 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200854 41698 77882 YPS000857 17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000861 17578 53763 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53766 CDP100382 29642 65826 NME200858 41702 77886 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41703 77887 YPS000868 17582 53766 CDP100383 29644 65828 NME200866 41704 77888 YPS000870 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17585 53769 CDP100388 29646 65830 NME200871 41706 77890 YPS000874 17585 53776 CDP100388 29646 65830 NME200873 41706 77891 YPS000874 17587 53771 CDP100400 29649 65831 NME200887 41701 77894 YPS000890 17586 53770 CDP100408 29651 65835 NME200887 41711 77894 YPS000909 17590 53774 CDP100409 29652 65836 NME200897 41715 77897 YPS000909 17590 53776 CDP100409 29653 65837 NME200893 41714 77896 YPS000909 17590 53776 CDP100414 29655 65836 NME200897 41715 77899 YPS000909 17591 53776 CDP100414 29655 65830 NME200897 41715 77899 YPS000909 17594 53776 CDP100418							i i		
17569 53753 CDP100349 29631 65815 NME200834 41692 77876 YPS000836 17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100365 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000855 17577 53761 CDP100375 29639 65823 NME200855 41699 77883 YPS000857 17578 53762 CDP100378 29640 65824 NME200856 41700 77884 YPS000861 17578 53765 CDP100379 29641 65825 NME200858 41700 77884 YPS000863 17579 53763 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200858 41702 77886 YPS000868 17581 53765 CDP100382 29642 65826 NME200866 41704 77888 YPS000868 17582 53766 CDP100382 29644 65828 NME200866 41704 77888 YPS000868 17582 53766 CDP100385 29644 65828 NME200866 41704 77889 YPS000870 17582 53766 CDP100388 29644 65828 NME200870 41705 77889 YPS000870 17584 53768 CDP100388 29646 65830 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200871 41706 77890 YPS000874 17585 53769 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17586 53770 CDP100396 29647 65831 NME200873 41708 77893 YPS000874 17587 53771 CDP100400 29649 65833 NME200879 41709 77893 YPS000890 17588 53772 CDP100408 29650 65834 NME200887 41710 77894 YPS000900 17589 53774 CDP100408 29650 65834 NME200887 41711 77895 YPS000900 17590 53774 CDP100408 29650 65834 NME200887 41711 77895 YPS000900 17591 53775 CDP100404 29653 65836 NME200897 41713 77897 YPS000900 17591 53775 CDP100414 29655 65839 NME200899 41716 77900 YPS000900 17594 53778 CDP100418 29655 65840 NME200890 41716 77900 YPS000900 17594 53778 CDP100418 29655 65840 NME200890 41716 77900 YPS000900 17594 53778 CDP100418 29655 65840 NME200901 41717 77901 YPS000930 17594 53778 CDP100418 29655 65840 NME200901 41717 77901 YPS000930									
17570 53754 CDP100352 29632 65816 NME200836 41693 77877 YPS000842 17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100363 29635 65818 NME200847 41695 77879 YPS000846 17574 53758 CDP100365 29636 65820 NME200849 41697 77881 YPS000845 17575 53758 CDP100371 29637 65821 NME200853 41697 77881 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100378 29640 65824 NME200856 41700 77884 YPS000861 17578 53763 CDP100379 29641 65825 NME200857 41701 77885 YPS000868 17578 53763 CDP100382 29642 65826							41691		YPS000834
17571 53755 CDP100360 29633 65817 NME200837 41694 77878 YPS000843 17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100365 29636 65820 NME200854 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000857 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53764 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200866 41704 77888 YPS000868 17581 53765 CDP100383 29644 65828 NME200866 41704 77888 YPS000868 17582 53766 CDP100385 29644 65828 NME200866 41704 77888 YPS000870 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17585 53768 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29644 65828 NME200870 41705 77889 YPS000872 17586 53770 CDP100399 29648 65832 NME200873 41707 77891 YPS000890 17586 53770 CDP100400 29649 65831 NME200881 41710 77894 YPS000900 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53776 CDP100409 29651 65835 NME200897 41715 77896 YPS000909 17590 53776 CDP100410 29653 65830 NME200897 41715 77899 YPS000909 17590 53776 CDP100410 29655 65836 NME200897 41715 77899 YPS000909 17592 53776 CDP100411 29655 65830 NME200899 41716 77900 YPS000930 17594 53778 CDP100418 29656 65840 NME200890 41716 77901 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000930 17594 53778 CDP100418							41692	77876	
17572 53756 CDP100362 29634 65818 NME200847 41695 77879 YPS000845 17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100371 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200855 41699 77883 YPS000855 17576 53760 CDP100375 29639 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100378 29639 65823 NME200856 41700 77884 YPS000863 17579 53762 CDP100378 29640 65825 NME200858 41701 77885 YPS000863 17580 53764 CDP100382 29642 65826 NME200858 41702 77886 YPS000868 17581 53765 CDP100383 29644 65828	17570	53754	CDP100352	29632	65816	NME200836	41693	77877	YPS000842
17573 53757 CDP100363 29635 65819 NME200849 41696 77880 YPS000846 17574 53758 CDP100365 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200855 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100378 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100382 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53766 CDP100385 29644 65828	17571	53755	CDP100360	29633	65817	NME200837	41694	77878	YPS000843
17574 53758 CDP100365 29636 65820 NME200853 41697 77881 YPS000851 17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100375 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100387 29641 65825 NME200858 41702 77886 YPS000868 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100385 29643 65827 NME200870 41705 77888 YPS000871 17583 53767 CDP100387 29645 65829	17572	53756	CDP100362	29634	65818	NME200847	41695	77879	YPS000845
17575 53759 CDP100371 29637 65821 NME200854 41698 77882 YPS000855 17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100379 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100382 29642 65826 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41704 77889 YPS000870 17582 53766 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53769 CDP100388 29646 65830	17573	53757	CDP100363	29635	65819	NME200849	41696	77880	YPS000846
17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41704 77888 YPS000870 17582 53766 CDP100387 29645 65829 NME200870 41705 77889 YPS000872 17584 53768 CDP100388 29646 65830 NME200871 41706 77890 YPS000872 17585 53769 CDP100396 29647 65831	17574	53758	CDP100365	29636	65820	NME200853	41697	77881	YPS000851
17576 53760 CDP100373 29638 65822 NME200855 41699 77883 YPS000857 17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41704 77888 YPS000870 17583 53766 CDP100387 29645 65828 NME200871 41705 77889 YPS000871 17585 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000890 17586 53770 CDP100399 29648 65831	17575	53759	CDP100371	29637	65821	NME200854	41698	77882	YPS000855
17577 53761 CDP100375 29639 65823 NME200856 41700 77884 YPS000861 17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100385 29643 65827 NME200866 41704 77888 YPS000870 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17583 53767 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000890 17586 53770 CDP100399 29648 65831	17576	53760		29638		NME200855			
17578 53762 CDP100378 29640 65824 NME200857 41701 77885 YPS000863 17579 53763 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41704 77888 YPS000870 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17583 53767 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17585 53769 CDP100399 29648 65832 NME200873 41708 77892 YPS000890 17586 53770 CDP100400 29649 65833	17577	53761	CDP100375	29639	65823		41700		
17579 53763 CDP100379 29641 65825 NME200858 41702 77886 YPS000864 17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41704 77888 YPS000870 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17583 53767 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17585 53769 CDP100396 29647 65831 NME200873 41708 77892 YPS000890 17586 53770 CDP100400 29649 65832 NME200879 41709 77893 YPS000990 17588 53772 CDP100404 29650 65834							41701		
17580 53764 CDP100382 29642 65826 NME200861 41703 77887 YPS000868 17581 53765 CDP100383 29643 65827 NME200866 41704 77888 YPS000870 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17583 53767 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17585 53769 CDP100396 29647 65831 NME200873 41708 77892 YPS000890 17586 53770 CDP100399 29648 65832 NME200879 41709 77893 YPS000894 17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000900 17589 53773 CDP100408 29651 65835	17579	53763	CDP100379	29641					and the second s
17581 53765 CDP100383 29643 65827 NME200866 41704 77888 YPS000870 17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17583 53767 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17585 53769 CDP100396 29647 65831 NME200873 41708 77892 YPS000890 17586 53770 CDP100399 29648 65832 NME200879 41709 77893 YPS000894 17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000990 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000990 17590 53774 CDP100409 29652 65836									
17582 53766 CDP100385 29644 65828 NME200870 41705 77889 YPS000871 17583 53767 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17585 53769 CDP100396 29647 65831 NME200873 41708 77892 YPS000890 17586 53770 CDP100399 29648 65832 NME200879 41709 77893 YPS000894 17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000990 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000909 17591 53775 CDP100410 29653 65837									
17583 53767 CDP100387 29645 65829 NME200871 41706 77890 YPS000872 17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17585 53769 CDP100396 29647 65831 NME200873 41708 77892 YPS000890 17586 53770 CDP100399 29648 65832 NME200879 41709 77893 YPS000894 17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000900 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000909 17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100417 29655 65839	-								
17584 53768 CDP100388 29646 65830 NME200872 41707 77891 YPS000874 17585 53769 CDP100396 29647 65831 NME200873 41708 77892 YPS000890 17586 53770 CDP100399 29648 65832 NME200879 41709 77893 YPS000894 17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000900 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000907 17590 53774 CDP100409 29652 65836 NME200892 41713 77897 YPS000920 17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000925 17593 53777 CDP100417 29655 65839									
17585 53769 CDP100396 29647 65831 NME200873 41708 77892 YPS000890 17586 53770 CDP100399 29648 65832 NME200879 41709 77893 YPS000894 17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000900 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000907 17590 53774 CDP100409 29652 65836 NME200892 41713 77897 YPS0009909 17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100417 29655 65839 NME200897 41715 77899 YPS000930 17594 53778 CDP100418 29656 65840 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
17586 53770 CDP100399 29648 65832 NME200879 41709 77893 YPS000894 17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000900 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000907 17590 53774 CDP100409 29652 65836 NME200892 41713 77897 YPS000909 17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									
17587 53771 CDP100400 29649 65833 NME200881 41710 77894 YPS000900 17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000907 17590 53774 CDP100409 29652 65836 NME200892 41713 77897 YPS000909 17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000930 17593 53777 CDP100417 29655 65839 NME200899 41716 77900 YPS000931 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									
17588 53772 CDP100404 29650 65834 NME200882 41711 77895 YPS000901 17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000907 17590 53774 CDP100409 29652 65836 NME200892 41713 77897 YPS000909 17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000925 17593 53777 CDP100417 29655 65839 NME200899 41716 77900 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931			1						
17589 53773 CDP100408 29651 65835 NME200887 41712 77896 YPS000907 17590 53774 CDP100409 29652 65836 NME200892 41713 77897 YPS000909 17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000925 17593 53777 CDP100417 29655 65839 NME200899 41716 77900 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									
17590 53774 CDP100409 29652 65836 NME200892 41713 77897 YPS000909 17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000925 17593 53777 CDP100417 29655 65839 NME200899 41716 77900 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									
17591 53775 CDP100410 29653 65837 NME200893 41714 77898 YPS000920 17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000925 17593 53777 CDP100417 29655 65839 NME200899 41716 77900 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									
17592 53776 CDP100414 29654 65838 NME200897 41715 77899 YPS000925 17593 53777 CDP100417 29655 65839 NME200899 41716 77900 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									
17593 53777 CDP100417 29655 65839 NME200899 41716 77900 YPS000930 17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									
17594 53778 CDP100418 29656 65840 NME200901 41717 77901 YPS000931									•
17595 53779 CDP100421 29657 65841 NME200903 41718 77902 YPS000933									
	1/393	53779	CDP100421	29657	65841	NME200903	41718	77902	YPS000933

WO (02/077183					PCT/US02/09107				
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID		
SeqID	SeqID		SeqID	SeqID		SeqID	SeqID			
17596	53780	CDP100423	29658	65842	NME200905	41719	77903	YPS000934		
17597	53781	CDP100424	29659	65843	NME200908	41720	77904	YPS000940		
17598	53782	CDP100429	29660	65844	NME200915	41721	77905	YPS000941		
17599	53783	CDP100432	29661	65845	NME200929	41722	77906	YPS000946		
17600	53784	CDP100435	29662	65846	NME200933	41723	77907	YPS000947		
17601	53785	CDP100440	29663	65847	NME200935	41724	77908	YPS000948		
17602	53786	CDP100444	29664	65848	NME200939	41725	77909	YPS000950		
17603	53787	CDP100447	29665	65849	NME200943	41726	77910	YPS000958		
17604	53788	CDP100449	29666	65850	NME200946	41727	77911	YPS000964		
17605	53789	CDP100453	29667	65851	NME200954	41728	77912	YPS000965		
17606	53790	CDP100454	29668	65852	NME200956	41729	77913	YPS000969		
17607	53791	CDP100459	29669	65853	NME200958	41730	77914	YPS000978		
17608	53792	CDP100460	29670	65854	NME200960	41731	77915	YPS000986		
17609	53793	CDP100474	29671	65855	NME200966	41732	77916	YPS000988		
17610	53794	CDP100479	29672	65856	NME200968	41733	77917	YPS000992		
17611	53795	CDP100481	29673	65857	NME200969	41734	77918	YPS000993		
17612	53796	CDP100483	29674	65858	NME200972	41735	77919	YPS000994		
17613	53797	CDP100485	29675	65859	NME200978	41736	77920	YPS000995		
17614	53798	CDP100486	29676	65860	NME200980	41737	77921	YPS000997		
17615	53799	CDP100488	29677	65861	NME200998	41738	77922	YPS001004		
17616	53800	CDP100495	29678	65862	NME201002	41739	77923	YPS001009		
17617	53801	CDP100497	29679	65863	NME201007	41740	77924	YPS001010		
17618	53802	CDP100500	29680	65864	NME201008	41741	77925	YPS001012		
17619	53803	CDP100504	29681	65865	NME201018	41742	77926	YPS001014		
17620	53804	CDP100508	29682	65866	NME201026	41743	77927	YPS001016		
17621	53805	CDP100511	29683	65867	NME201028	41744	77928	YPS001018		
17622	53806	CDP100520	29684	65868	NME201034	41745	77929	YPS001020		
17623	53807	CDP100521	29685	65869	NME201050	41746	77930	YPS001022		
17624	53808	CDP100523	29686	65870	NME201051	41747	77931	YPS001023		
17625	53809	CDP100533	29687	65871	NME201057	41748	77932	YPS001024		
17626	53810	CDP100537	29688	65872	NME201059	41749	77933	YPS001037		
17627	53811	CDP100538	29689	65873	NME201060	41750	77934	YPS001038		
17628	53812	CDP100541	29690	65874	NME201061	41751	77935	YPS001047		
17629	53813	CDP100542	29691	65875	NME201066	41752	77936	YPS001049		
17630	53814	CDP100545	29692	65876	NME201071 NME201076	41753	77937 77938	YPS001051 YPS001052		
17631	53815	CDP100549	29693	65877	NME201076 NME201088	41754	77938 77939	YPS001052 YPS001055		
17632 17633	53816 53817	CDP100554 CDP100571	29694 29695	65878 65879	NME201088 NME201109	41755 41756	77940	YPS001057		
17633	53818	CDP100571 CDP100572	29696	65880	NME201109 NME201125	41757	77940 77941	YPS001057		
17634	53819	CDP100580	29697	65881	NME201123 NME201142	41758	77942	YPS001065		
17636	53820	CDF 100580 CDP100583	29698	65882	NME201142	41759	77942	YPS001066		
17637	53820	CDP100585	29699	65883	NME201144 NME201150	41760	77944	YPS001070		
17638	53822	CDP100587	29700	65884	NME201153	41761	77945	YPS001074		
17639	53823	CDP100588	29701	65885	NME201154	41762	77946	YPS001083		
17640	53824	CDP100589	29702	65886	NME201155	41763	77947	YPS001085		
17641	53825	CDP100600	29703	65887	NME201159	41764	77948	YPS001087		
17642	53826	CDP100606	29704	65888	NME201160	41765	77949	YPS001090		
17643	53827	CDP100607	29705	65889	NME201166	41766	77950	YPS001092		
17644	53828	CDP100610	29706	65890	NME201171	41767	77951	YPS001094		
17645	53829	CDP100612	29707	65891	NME201221	41768	77952	YPS001103		
17646	53830	CDP100613	29708	65892	NME201227	41769	77953	YPS001104		
17647	53831	CDP100617	29709	65893	NME201236	41770	77954	YPS001119		
17648	53832	CDP100618	29710	65894	NME201237	41771	77955	YPS001121		
17649	53833	CDP100619	29711	65895	NME201238	41772	77956	YPS001125		
17650	53834	CDP100623	29712	65896	NME201239	41773	77957	YPS001127		

WO 02/077183	PCT/US02/09107
WU UZ/U / / 183	PC1/US02/0910/

	02/07/103						101/050	
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID		SeqID	\mathbf{SeqID}	
17651	52925	CDD100622	20712	65897	NME201245	41774	77958	YPS001128
17651	53835	CDP100633	29713				77959	YPS001129
17652	53836	CDP100635	29714	65898	NME201248	41775		
17653	53837	CDP100636	29715	65899	NME201254	41776	77960	YPS001131
17654	53838	CDP100638	29716	65900	NME201257	41777	77961	YPS001135
17655	53839	CDP100639	29717	65901	NME201261	41778	77962	YPS001136
17656	53840	CDP100640	29718	65902	NME201265	41779	77963	YPS001137
17657	53841	CDP100653	29719	65903	NME201276	41780	77964	YPS001140
17658	53842	CDP100654	29720	65904	NME201277	41781	77965	YPS001142
17659	53843	CDP100658	29721	65905	NME201279	41782	77966	YPS001147
17660	53844	CDP100666	29722	65906	NME201284	41783	77967	YPS001148
17661	53845	CDP100671	29723	65907	NME201287	41784	77968	YPS001151
17662	53846	CDP100672	29724	65908	NME201288	41785	77969	YPS001153
17663	53847	CDP100674	29725	65909	NME201292	41786	77970	YPS001155
17664	53848	CDP100675	29726	65910	NME201294	41787	77971	YPS001157
17665	53849	CDP100677	29727	65911	NME201296	41788	77972	YPS001160
17666	53850	CDP100684	29728	65912	NME201304	41789	77973	YPS001161
17667	53851	CDP100695	29729	65913	NME201305	41790	77974	YPS001169.
17668	53852	CDP100699	29730	65914	NME201309	41791	77975	YPS001170
17669	53853	CDP100702	29731	65915	NME201311	41792	77976	YPS001173
17670	53854	CDP100703	29732	65916	NME201319	41793	77977	YPS001177
17671	53855	CDP100704	29733	65917	NME201321	41794	77978	YPS001180
17672	53856	CDP100706	29734	65918	NME201326	41795	77979	YPS001186
17673	53857	CDP100733	29735	65919	NME201320	41796	77980	YPS001188
17674	53858	CDP100735	29736	65920	NME201332	41797	77981	YPS001189
17675	53859	CDP100741	29737	65921	NME201346	41798	77982	YPS001192
17676	53860	CDP100744	29738	65922	NME201340	41799	77983	YPS001193
17677	53861	CDP100748	29739	65923	NME201357	41800	77984	YPS001199
17678	53862	CDP100750	29740	65924	NME201357 NME201359	41801	77985	YPS001209
		CDP100750 CDP100751	29740	65925	NME201359 NME201361	41801	77986	YPS001211
17679	53863	1					77980	YPS001211
17680	53864	CDP100752	29742	65926	NME201364	41803		
17681	53865	CDP100770	29743	65927	NME201367	41804	77988	YPS001221
17682	53866	CDP100772	29744	65928	NME201370	41805	77989	YPS001224
17683	53867	CDP100773	29745	65929	NME201373	41806	77990	YPS001225
17684	53868	CDP100774	29746	65930	NME201374	41807	77991	YPS001228
17685	53869	CDP100775	29747	65931	NME201375	41808	77992	YPS001229
17686	53870	CDP100776	29748	65932	NME201384	41809	77993	YPS001230
17687	53871	CDP100778	29749	65933	NME201387	41810	77994	YPS001237
17688	53872	CDP100780	29750	65934	NME201393	41811	77995	YPS001239
17689	53873	CDP100781	29751	65935	NME201394	41812	77996	YPS001244
17690	53874	CDP100782	29752	65936	NME201395	41813	77997	YPS001246
17691	53875	CDP100784	29753	65937	NME201396	41814	77998	YPS001247
17692	53876	CDP100789	29754	65938	NME201398	41815	77999	YPS001253
17693	53877	CDP100795	29755	65939	NME201410	41816	78000	YPS001257
17694	53878	CDP100799	29756	65940	NME201411	41817	78001	YPS001261
17695	53879	CDP100802	29757	65941	NME201412	41818	78002	YPS001262
17696	53880	CDP100805	29758	65942	NME201414	41819	78003	YPS001263
17697	53881	CDP100811	29759	65943	NME201415	41820	78004	YPS001274
17698	53882	CDP100814	29760	65944	NME201426	41821	78005	YPS001275
17699	53883	CDP100815	29761	65945	NME201427	41822	78006	YPS001277
17700	53884	CDP100817	29762	65946	NME201429	41823	78007	YPS001278
17701	53885	CDP100823	29763	65947	NME201430	41824	78008	YPS001281
17702	53886	CDP100825	29764	65948	NME201432	41825	78009	YPS001282
17703	53887	CDP100831	29765	65949	NME201434	41826	78010	YPS001285
17704	53888	CDP100836	29766	65950	NME201435	41827	78011	YPS001287
17705	53889	CDP100838	29767	65951	NME201436	41828	78012	YPS001307
			•	500				

WO	12/01/103	-					1 € 17 € 50	12/07107
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID		SeqID	SeqID	
15506	50000	GDD100044	207.60	65050	ND (E001 400	41000	70012	X7DG001214
17706	53890	CDP100844	29768	65952	NME201438	41829	78013	YPS001314
17707	53891	CDP100846	29769	65953	NME201443	41830	78014	YPS001316
17708	53892	CDP100848	29770	65954	NME201444	41831	78015	YPS001318
17709	53893	CDP100850	29771	65955	NME201447	41832	78016	YPS001320
17710	53894	CDP100852	29772	65956	NME201451	41833	78017	YPS001321
17711	53895	CDP100853	29773	65957	NME201452	41834	78018	YPS001322
17712	53896	CDP100854	29774	65958	NME201455	41835	78019	YPS001324
17713	53897	CDP100855	29775	65959	NME201458	41836	78020	YPS001326
17714	53898	CDP100856	29776	65960	NME201465	41837	78021	YPS001335
17715	53899	CDP100861	29777	65961	NME201469	41838	78022	YPS001338
17716	53900	CDP100862	29778	65962	NME201478	41839	78023	YPS001340
17717	53901	CDP100866	29779	65963	NME201479	41840	78024	YPS001350
17718	53902	CDP100874	29780	65964	NME201487	41841	78025	YPS001354
17719	53903	CDP100876	29781	65965	NME201493	41842	78026	YPS001366
17720	53904	CDP100877	29782	65966	NME201494	41843	78027	YPS001373
17721	53905	CDP100879	29783	65967	NME201498	41844	78028	YPS001379
17722	53906	CDP100884	29784	65968	NME201499	41845	78029	YPS001380
17723	53907	CDP100886	29785	65969	NME201501	41846	78029	YPS001381
	53907	CDF100880 CDP100889	29786	65970	NME201501 NME201508	41847	78030	YPS001381
17724		CDP100889 CDP100903					78031	
17725	53909		29787	65971	NME201512	41848		YPS001397
17726	53910	CDP100904	29788	65972	NME201515	41849	78033	YPS001400
17727	53911	CDP100907	29789	65973	NME201516	41850	78034	YPS001402
17728	53912	CDP100910	29790	65974	NME201517	41851	78035	YPS001404
17729	53913	CDP100912	29791	65975	NME201518	41852	78036	YPS001406
17730	53914	CDP100913	29792	65976	NME201519	41853	78037	YPS001414
17731	53915	CDP100914	29793	65977	NME201520	41854	78038	YPS001416
17732	53916	CDP100915	29794	65978	NME201526	41855	78039	YPS001422
17733	53917	CDP100920	29795	65979	NME201529	41856	78040	YPS001429
17734	53918	CDP100921	29796	65980	NME201532	41857	78041	YPS001431
17735	<i>5</i> 3919	CDP100932	29797	65981	NME201541	41858	78042	YPS001438
17736	53920	CDP100933	29798	65982	NME201542	41859	78043	YPS001448
17737	53921	CDP100938	29799	65983	NME201548	41860	78044	YPS001450
17738	53922	CDP100939	29800	65984	NME201555	41861	78045	YPS001453
17739	53923	CDP100940	29801	65985	NME201558	41862	78046	YPS001456
17740	53924	CDP100947	29802	65986	NME201560	41863	78047	YPS001461
17741	53925	CDP100957	29803	65987	NME201565	41864	78048	YPS001466
17742	53926	CDP100963	29804	65988	NME201566	41865	78049	YPS001475
17743	53927	CDP100967	29805	65989	NME201568	41866	78050	YPS001481
17744	53928	CDP100969	29806	65990	NME201571	41867	78051	YPS001482
17745	53929	CDP100970	29807	65991	NME201572	41868	78052	YPS001486
17746	53930	CDP100971	29808	65992	NME201584	41869	78053	YPS001489
17747	53931	CDP100973	29809	65993	NME201585	41870	78054	YPS001508
17748	53932	CDP100976	29810	65994	NME201587	41871	78055	YPS001510
17749	53933	CDP100979	29811	65995	NME201594	41872	78056	YPS001517
17750	53934	CDP100984	29812	65996	NME201595	41873	78057	YPS001519
17751	53934	CDP100984 CDP100986	29812	65997	NME201595	41874	78057	YPS001519
17751	53936	CDP100986 CDP100987	29813	65998	NME201590 NME201597	41875	78059	YPS001521 YPS001525
17753	53936	CDP100987 CDP100988	29814	65999	NME201597 NME201599	41876	78039 78060	YPS001526
							78060 78061	
17754	53938	CDP100996	29816	66000	NME201600	41877		YPS001527
17755	53939	CDP100997	29817	66001	NME201601	41878	78062	YPS001530
17756	53940	CDP101004	29818	66002	NME201603	41879	78063	YPS001531
17757	53941	CDP101007	29819	66003	NME201605	41880	78064	YPS001534
17758	53942	CDP101008	29820	66004	NME201607	41881	78065	YPS001546
17759	53943	CDP101009	29821	66005	NME201609	41882	78066	YPS001548
17760	53944	CDP101012	29822	66006	NME201616	41883	78067	YPS001553

WO 02/077102	DCT/IIC02/00107
WO 02/077183	PCT/US02/09107

WU	02/0 / / 183						PC 1/US	12/0910/
DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID
17761	53945	CDP101013	29823	66007	NME201617	41884	78068	YPS001556
17762	53946	CDP101017	29824	66008	NME201620	41885	78069	YPS001561
17763	53947	CDP101021	29825	66009	NME201622	41886	78070	YPS001562
17764	53948	. CDP101023	29826	66010	NME201624	41887	78071	YPS001563
17765	53949	CDP101025	29827	66011	NME201625	41888	78072	YPS001564
17766	53950	CDP101026	29828	66012	NME201627	41889	78073	YPS001566
17767	53951	CDP101033	29829	66013	NME201634	41890	78074	YPS001567
17768	53952	CDP101034	29830	66014	NME201635	41891	78075	YPS001568
17769	53953	CDP101043	29831	66015	NME201638	41892	78076	YPS001577
17770	53954	CDP101052	29832	66016	NME201642	41893	78077	YPS001578
17771	53955	CDP101053	29833	66017	NME201646	41894	78078	YPS001580
17772	53956	CDP101055	29834	66018	NME201654	41895	78079	YPS001582
17773	53957	CDP101057	29835	66019	NME201659	41896	78080	YPS001584
17774	53958	CDP101061	29836	66020	NME201667	41897	78081	YPS001591
17775	53959	CDP101063	29837	66021	NME201668	41898	78082	YPS001594
17776	53960	CDP101064	29838	66022	NME201669	41899	78083	YPS001597
17777	53961	CDP101065	29839	66023	NME201722	41900	78084	YPS001600
17778	53962	CDP101075	29840	66024	NME201743	41901	78085	YPS001602
17779	53963	CDP101084	29841	66025	NME201747	41902	78086	YPS001603
17780	53964	CDP101088	29842	66026	NME201748	41903	78087	YPS001606
17781	53965	CDP101089	29843	66027	NME201751	41904	78088	YPS001608
17782	53966	CDP101090	29844	66028	NME201757	41905	78089	YPS001609
17783	53967	CDP101095	29845	66029	NME201768	41906	78090	YPS001617
17784	53968	CDP101096	29846	66030	NME201774	41907	78091	YPS001621
17785	53969	CDP101104	29847	66031	NME201781	41908	78092	YPS001623
17786	53970	CDP101112	29848	66032	NME201783	41909	78093	YPS001628
17787	53971	CDP101113	29849	66033	NME201788	41910	78094	YPS001640
17788	53972	CDP101114	29850	66034	NME201790	41911	78095	YPS001655
17789	53973	CDP101115	29851	66035	NME201792	41912	78096	YPS001659
17790	53974	CDP101117	29852	66036	NME201794	41913	78097	YPS001664
17791	53975	CDP101120	29853	66037	NME201798	41914	78098	YPS001667
17792	53976	CDP101127	29854	66038	NME201799	41915	78099	YPS001671
17793	53977	CDP101132	29855	66039	NME201800	41916	78100	YPS001674
17794	53978	CDP101133	29856	66040	NME201812	41917	78101	YPS001677
17795	53979	CDP101134	29857	66041	NME201813	41918	78102	YPS001684
17796	53980	CDP101135	29858	66042	NME201814	41919	78103	YPS001686
17797	53981	CDP101138	29859	66043	NME201818	41920	78104	YPS001711
17798	53982	CDP101144	29860	66044	NME201822	41921	78105	YPS001716
17799	53983	CDP101146	29861	66045	NME201828	41922	78106	YPS001717
17800	53984	CDP101148	29862	66046	NME201839	41923	78107	YPS001725
17801	53985	CDP101150	29863	66047	NME201859	41924	78108	YPS001737
17802	53986	CDP101153	29864	66048	NME201862	41925	78109	YPS001740
17803	53987	CDP101154	29865	66049	NME201865	41926	78110	YPS001743
17804	53988	CDP101155	29866	66050	NME201868	41927	78111	YPS001746
17805	53989	CDP101160	29867	66051	NME201872	41928	78112	YPS001748
17806	53990	CDP101162	29868	66052	NME201874	41929	78113	YPS001750
17807	53991	CDP101163	29869	66053	NME201879	41930	78114	YPS001759
17808	53992	CDP101168	29870	66054	NME201886	41931	78115	YPS001761
17809	53993	CDP101169	29871	66055	NME201898	41932	78116	YPS001763
17810	53994	CDP101170	29872	66056	NME201901	41933	78117	YPS001764
17811	53995	CDP101174	29873	66057	NME201902	41934	78118	YPS001766
17812	53996	CDP101177	29874	66058	NME201903	41935	78119	YPS001789
17813	53997	CDP101180	29875	66059	NME201904	41936	78120	YPS001792
17814	53998	CDP101183	29876	66060	NME201905	41937	78121	YPS001797
17815 :	53999	CDP101191	29877	66061	NME201906	41938	78122	YPS001804

WO 02/077183	PCT/US02/09107

					ا ما ما		7	
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID		SeqID	SeqID	•
17816	54000	CDP101196	29878	66062	NME201907	41939	78123	ÝPS001806
17817	54001	CDP101216	29879	66063	NME201908	41940	78124	YPS001811
17818	54002	CDP101218	29880	66064	NME201910	41941	78125	YPS001820
17819	54003	CDP101220	29881	66065	NME201912	41942	78126	YPS001825
17820	54004	CDP101222	29882	66066	NME201913	41943	78127	YPS001830
17821	54005	CDP101225	29883	66067	NME201914	41944	78128	YPS001843
17821	54005	CDP101232	29884	66068	NME201914	41945	78129	YPS001846
17822	54007	CDP101232	29885	66069	NME201917	41946	78130	YPS001848
17823	54008	CDP101237	29886	66070	NME201928	41947	78131	YPS001851
17824	54009	CDF101237 CDP101238	29887	66071	NME201928	41948	78132	YPS001853
17825	54010	CDP101246	29888	66072	NME201942	41949	78133	YPS001855
17827	54010	CDF 101240 CDP101247	29889	66073	NME201942	41950	78134	YPS001858
17828	54011	CDP101247 CDP101250	29890	66074	NME201944 NME201949	41951	7813 4 78135	YPS001861
17829	54012	CDP101250	29891	66075	NME201949 NME201965	41952	78135 78136	YPS001862
	54013	CDP101251 CDP101252	29891	66076	NME201965 NME201966	41953	78130	YPS001863
17830		CDP101252 CDP101254	29892	66077	NME201967	41953	78137	YPS001864
17831	54015				NME201907 NME201973	41954	78138 78139	YPS001865
17832	54016	CDP101255	29894	66078	NME201975 NME201975	41955	78139 78140	YPS001866
17833	54017	CDP101257	29895	66079		41950	78140 78141	YPS001867
17834	54018	CDP101259	29896	66080	NME201976 NME201982	41957	78141 78142	YPS001868
17835	54019	CDP101264	29897	66081		41958	78142 78143	YPS001808
17836	54020	CDP101266	29898	66082	NME201984			YPS001875
17837	54021	CDP101267	29899	66083	NME201988	41960	78144 78145	
17838	54022	CDP101268	29900	66084	NME201989	41961	78145	YPS001876
17839	54023	CDP101270	29901	66085	NME201990	41962	78146	YPS001880
17840	54024	CDP101273	29902	66086	NME201998	41963	78147	YPS001881
17841	54025	CDP101276	29903	66087	NME201999	41964	78148	YPS001888
17842	54026	CDP101278	29904	66088	NME202000	41965	78149	YPS001891
17843	54027	CDP101279	29905	66089	NME202001	41966	78150	YPS001892
17844	54028	CDP101281	29906	66090	NME202002	41967	78151	YPS001897
17845	54029	CDP101282	29907	66091	NME202003	41968	78152	YPS001899
17846	54030	CDP101283	29908	66092	NME202008	41969	78153	YPS001906
17847	54031	CDP101284	29909	66093	NME202012	41970	78154	YPS001910
17848	54032	CDP101285	29910	66094	NME202016	41971	78155	YPS001917
17849	54033	CDP101286	29911	66095	NME202025	41972	78156	YPS001925
17850	54034	CDP101289	29912	66096	NME202026	41973	78157	YPS001944
17851	54035	CDP101293	29913	66097	NME202037	41974	78158	YPS001961
17852	54036	CDP101294	29914	66098	NME202038	41975	78159	YPS001962
17853	54037	CDP101308	29915	66099	NME202039	41976	78160	YPS001963
17854	54038	CDP101311	29916	66100	NME202045	41977	78161	YPS001964
17855	54039	CDP101315	29917	66101	NME202047	41978	78162	YPS001965
17856	54040	CDP101322	29918	66102	NME202048	41979	78163	YPS001978
17857	54041	CDP101325	29919	66103	NME202051	41980	78164	YPS001980
17858	54042	CDP101333	29920	66104	NME202053	41981	78165	YPS001982
17859	54043	CDP101347	29921	66105	NME202061	41982	78166	YPS001985
17860	54044	CDP101353	29922	66106	NME300318	41983	78167	YPS001991
17861	54045	CDP101373	29923	66107	NME300340	41984	78168	YPS001992
17862	54046	CDP101376	29924	66108	NME300455	41985	78169	YPS001994
17863	54047	CDP101383	29925	66109	NME300542	41986	78170	YPS001996
17864	54048	CDP101400	29926	66110	NME300608	41987	78171	YPS002002
17865	54049	CDP101406	29927	66111	NME300783	41988	78172	YPS002005
17866	54050	CDP101412	29928	66112	NME300873	41989	78173	YPS002007
17867	54051	CDP101414	29929	66113	NME300906	41990	78174	YPS002011
17868	54052	CDP101416	29930	66114	NME301036	41991	78175	YPS002012
17869	54053	CDP101417	29931	66115	NME301139	41992	78176	YPS002016
17870	54054	CDP101419	29932	66116	NME301279	41993	78177	YPS002018

WO	02/077183			PC1/US02/09107								
	-	_		 			_		 			

WU	12/0 / / 183						PCI/USC	12/09107
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID		SeqID	SeqID	
17871	54055	CDP101420	29933	66117	NME301308	41994	78178	YPS002027
17872	54056	CDP101422	29934	66118	NME301326	41995	78179	YPS002032
17873	54057	CDP101424	29935	66119	NME301505	41996	78180	YPS002035
17874	54058	CDP101428	29936	66120	NME301637	41997	78181	YPS002040
17875	54059	CDP101430	29937	66121	NME301662	41998	78182	YPS002049
17876	54060	CDP101431	29938	66122	NME301805	41999	78183	YPS002052
17877	54061	CDP101447	29939	66123	NME301914	42000	78184	YPS002057
17878	54062	CDP101454	29940	66124	PAE100175	42001	78185	YPS002059
17879	54063	CDP101455	29941	66125	PAE100476	42002	78186	YPS002062
17880	54064	CDP101457	29942	66126	PAE100477	42003	78187	YPS002064
17881	54065	CDP101458	29943	66127	PAE102229	42004	78188	YPS002067
17882	54066	CDP101464	29944	66128	PAE105948	42005	78189	YPS002068
17883	54067	CDP101465	29945	66129	PAE106765	42006	78190	YPS002074
17884	54068	CDP101466	29946	66130	PAE107208	42007	78191	YPS002077
17885	54069	CDP101469	29947	66131	PAE107214	42008	78192	YPS002089
17886	54070	CDP101470	29948	66132	PAE107444	42009	78193	YPS002091
17887	54071	CDP101471	29949	66133	PAE108407	42010	78194	YPS002092
17888	54072	CDP101476	29950	66134	PAE109042	42011	78195	YPS002093
17889	54073	CDP101483	29951	66135	PAE109042	42011	78196	YPS002105
17890	54074	CDP101484	29952	66136	PAE109842	42012	78190	YPS002108
17891	54075	CDP101484 CDP101486	29953	66137	PAE110961	42013	78197 78198	YPS002106
17891	54075 54076	CDP101480 CDP101490	29953 29954					
		1		66138	PAE110993	42015	78199	YPS002118
17893	54077	CDP101491	29955	66139	PAE111475	42016	78200	YPS002121
17894	54078	CDP101493	29956	66140	PAE111567	42017	78201	YPS002123
17895	54079	CDP101495	29957	66141	PAE111649	42018	78202	YPS002128
17896	54080	CDP101500	29958	66142	PAE111701	42019	78203	YPS002136
17897	54081	CDP101502	29959	66143	PAE111918	42020	78204	YPS002137
17898	54082	CDP101508	29960	66144	PAE200001	42021	78205	YPS002142
17899	54083	CDP101511	29961	66145	PAE200002	42022	78206	YPS002147
17900	54084	CDP101514	29962	66146	PAE200004	42023	78207	YPS002148
17901	54085	CDP101519	29963	66147	PAE200005	42024	78208	YPS002149
17902	54086	CDP101521	29964	66148	PAE200009	42025	78209	YPS002150
17903	54087	CDP101523	29965	66149	PAE200013	42026	78210	YPS002162
17904	54088	CDP101532	29966	66150	PAE200017	42027	78211	YPS002165
17905	54089	CDP101536	29967	66151	PAE200036	42028	78212	YPS002174
17906	54090	CDP101537	29968	66152	PAE200074	42029	78213	YPS002176
17907	54091	CDP101544	29969	66153	PAE200094	42030	78214	YPS002180
17908	54092	CDP101551	29970	66154	PAE200139	42031	78215	YPS002190
17909	54093	CDP101553	29971	66155	PAE200152	42032	78216	YPS002201
17910	54094	CDP101556	29972	66156	PAE200177	42033	78217	YPS002204
17911	54095	CDP101560	29973	66157	PAE200196	42034	78218	YPS002207
17912	54096	CDP101562	29974	66158	PAE200235	42035	78219	YPS002210
17913	54097	CDP101563	29975	66159	PAE200243	42036	78220	YPS002228
17914	54098	CDP101565	29976	66160	PAE200245	42037	78221	YPS002232
17915	54099	CDP101567	29977	66161	PAE200317	42038	78222	YPS002234
17916	54100	CDP101570	29978	66162	PAE200326	42039	78223	YPS002248
17917	54101	CDP101572	29979	66163	PAE200341	42040	78224	YPS002249
17918	54102	CDP101573	29980	66164	PAE200349	42041	78225	YPS002254
17919	54103	CDP101575	29981	66165	PAE200353	42042	78226	YPS002256
17920	54104	CDP101577	29982	66166	PAE200356	42043	78227	YPS002263
17921	54105	CDP101578	29983	66167	PAE200361	42044	78228	YPS002265
17922	54106	CDP101579	29984	66168	PAE200371	42045	78229	YPS002267
17923	54107	CDP101580	29985	66169	PAE200380	42046	78230	YPS002273
17924	54108	CDP101582	29986	66170	PAE200386	42047	78231	YPS002274
17925	54109	CDP101585	29987	66171	PAE200393	42048	78231	YPS002276
1,720	0 1100	021101303	4 7701	001/1	1111/200393	-2U+0	10232	113004270

WO 02/077183	PCT/US02/09107

DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID
<u> </u>								·
17926	54110	CDP101606	29988	66172	PAE200394	42049	78233	YPS002279
17927	54111	CDP101612	29989	66173	PAE200403	42050	78234	YPS002281
17928	54112	CDP101613	29990	66174	PAE200410	42051	78235	YPS002288
17929	54113	CDP101614	29991	66175	PAE200419	42052	78236	YPS002289
17930	54114	CDP101615	29992	66176	PAE200420	42053	78237	YPS002291
17931	54115 54116	CDP101620 CDP101627	29993 29994	66177 66178	PAE200454 PAE200458	42054 42055	78238 78239	YPS002292 YPS002296
17932 17933	54117	CDP101627 CDP101629	2999 4 29995	66179	PAE200458 PAE200464	42056	78239 78240	YPS002290
17933	54117	CDP101629 CDP101634	29996	66180	PAE200466	42057	78240 78241	YPS002303
17934	54119	CDP101034 CDP101635	29997	66181	PAE200400 PAE200475	42058	78241 78242	YPS002304
17936	54120	CDF 101033 CDP101641	29998	66182	PAE200499	42059	78242 78243	YPS002308
17937	54121	CDP101644	29999	66183	PAE200500	42060	78243 78244	YPS002312
17938	54122	CDP101649	30000	66184	PAE200510	42061	78245	YPS002312
17939	54123	CDP101650	30001	66185	PAE200515	42062	78246	YPS002325
17940	54124	CDP101653	30002	66186	PAE200518	42063	78247	YPS002330
17941	54125	CDP101654	30003	66187	PAE200524	42064	78248	YPS002349
17942	54126	CDP101656	30004	66188	PAE200535	42065	78249	YPS002354
17943	54127	CDP101660	30005	66189	PAE200541	42066	78250	YPS002374
17944	54128	CDP101662	30006	66190	PAE200542	42067	78251	YPS002375
17945	54129	CDP101663	30007	66191	PAE200544	42068	78252	YPS002383
17946	54130	CDP101664	30008	66192	PAE200545	42069	78253	YPS002391
17947	54131	CDP101667	30009	66193	PAE200551	42070	78254	YPS002393
17948	54132	CDP101676	30010	66194	PAE200554	42071	78255	YPS002400
17949	54133	CDP101678	30011	66195	PAE200558	42072	78256	YPS002401
17950	54134	CDP101680	30012	66196	PAE200575	42073	78257	YPS002407
17951	54135·	CDP101683	30013	66197	PAE200576	42074	78258	YPS002413
17952	54136	CDP101687	30014	66198	PAE200577	42075	78259	YPS002425
17953	54137	CDP101688	30015	66199	PAE200578	42076	78260	YPS002427
17954	54138	CDP101689	30016	66200	PAE200579	42077	78261	YPS002431
17955	54139	CDP101690	30017	66201	PAE200580	42078	78262	YPS002439
17956	54140	CDP101702	30018	66202	PAE200583	42079	78263	YPS002442
17957	54141	CDP101706	30019	66203	PAE200585	42080	78264	YPS002443
17958	54142	CDP101707	30020	66204	PAE200586	42081	78265	YPS002444
17959	54143	CDP101711	30021	66205	PAE200591	42082	78266	YPS002447
17960	54144	CDP101712	30022	66206	PAE200650	42083	78267	YPS002449
17961	54145	CDP101713	30023	66207	PAE200704	42084	78268	YPS002450
17962	54146	CDP101714	30024	66208	PAE200732	42085	78269	YPS002451
17963	54147	CDP101719	30025	66209	PAE200758	42086	78270	YPS002452
17964	54148	CDP101722	30026	66210	PAE200759	42087	78271	YPS002453
17965	54149	CDP101725	30027	66211	PAE200765	42088	78272	YPS002454
17966	54150	CDP101728	30028	66212	PAE200767	42089	78273	YPS002455
17967 17968	54151	CDP101730	30029 30030	66213	PAE200770	42090	78274	YPS002467
17968	54152 54153	CDP101732 CDP101743	30030	66214 66215	PAE200794 PAE200796	42091	78275	YPS002471
17909	54154	CDP101743 CDP101746	30031	66216	PAE200796 PAE200818	42092 42093	78276	YPS002475
17970	54155	CDP101740 CDP101757	30032	66217	PAE200818 PAE200834	42093 42094	78277 78278	YPS002478 YPS002481
17971	54156	CDP101864	30033	66218	PAE200841	42094	78278 78279	YPS002481
17973	54157	CDP101886	30034	66219	PAE200857	42093	78279	YPS002485
17974	54158	CDP101898	30035	66220	PAE200882	42090	78280 78281	YPS002488
17975	54159	CDP101905	30030	66221	PAE200883	42097	78281 78282	YPS002490
17976	54160	CDP101960	30038	66222	PAE200894	42099	78283	YPS002491
17977	54161	CDP101961	30039	66223	PAE200897	42100	78284	YPS002491
17978	54162	CDP101982	30040	66224	PAE200900	42101	78285	YPS002493
17979	54163	CDP101991	30041	66225	PAE200902	42102	78286	YPS002494
17980	54164	CDP102004	30042	66226	PAE200903	42103	78287	YPS002502
		*			-			

WO 02/077183	PCT/US02/09107
W V UZ/U / / 103	EV.1/U302/03107

WU	02/07/183						PC1/USC	
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID		SeqID	SeqID	•
		GDD10000		66007	DATE200004	40104	79200	3700002504
17981	54165	CDP102030	30043	66227	PAE200904	42104	78288	YPS002504
17982	54166	CDP102039	30044	66228	PAE200912	42105	78289	YPS002505
17983	54167	CDP102065	30045	66229	PAE200915	42106	78290	YPS002509
17984	54168	CDP102071	30046	66230	PAE200916	42107	78291	YPS002513
17985	54169	CDP102152	30047	66231	PAE200934	42108	78292	YPS002514
17986	54170	CDP102158	30048	66232	PAE200936	42109	78293	YPS002520
17987	54171	CDP102191	30049	66233	PAE200954	42110	78294	YPS002522
17988	54172	CDP102193	30050	66234	PAE200955	42111	78295	YPS002524
17989	54173	CDP102359	30051	66235	PAE200961	42112	78296	YPS002528
17990	54174	CDP102360	30052	66236	PAE200962	42113	78297	YPS002530
17991	54175	CDP102364	30053	66237	PAE200970	42114	78298	YPS002535
17992	54176	CDP102415	30054	66238	PAE200973	42115	78299	YPS002537
17993	54177	CDP102420	30055	66239	PAE200993	42116	78300	YPS002538
17994	54178	CDP102437	30056	66240	PAE200994	42117	78301	YPS002545
17995	54179	CDP102441	30057	66241	PAE201013	42118	78302	YPS002550
17996	54180	CDP102443	30058	66242	PAE201038	42119	78303	YPS002552
17997	54181	CDP102452	30059	66243	PAE201053	42120	78304	YPS002556
17998	54182	CDP102491	30060	66244	PAE201072	42121	78305	YPS002558
17999	54183	CDP102540	30061	66245	PAE201078	42122	78306	YPS002559
18000	54184	CDP102558	30062	66246	PAE201090	42123	78307	YPS002560
18001	54185	CDP102565	30063	66247	PAE201097	42124	78308	YPS002575
18002	54186	CDP102587	30064	66248	PAE201126	42125	78309	YPS002580
18003	54187	CDP102624	30065	66249	PAE201128	42126	78310	YPS002584
18004	54188	CDP102654	30066	66250	PAE201134	42127	78311	YPS002586
18005	54189	CDP102662	30067	66251	PAE201149	42128	78312	YPS002593
18006	54190	CDP102682	30068	66252	PAE201154	42129	78313	YPS002596
18007	54191	CDP102780	30069	66253	PAE201155	42130	78314	YPS002598
18008	54192	CDP102797	30070	66254	PAE201156	42131	78315	YPS002602
18009	54193	CDP102826	30071	66255	PAE201167	42132	78316	YPS002604
18010	54194	CDP102843	30072	66256	PAE201179	42133	78317	YPS002608
18011	54195	CDP102875	30073	66257	PAE201182	42134	78318	YPS002613
18012	54196	CDP102895	30074	66258	PAE201193	42135	78319	YPS002615
18013	54197	CDP102947	30075	66259	PAE201211	42136	78320	YPS002618
18014	54198	CDP102949	30076	66260	PAE201229	42137	78321	YPS002619
18015	54199	CDP102956	30077	66261	PAE201251	42138	78322	YPS002621
18016	54200	CDP102962	30078	66262	PAE201276	42139	78323	YPS002625
18017	54201	CDP103271	30079	66263	PAE201279	42140	78324	YPS002639
18018	54202	CJU100001	30080	66264	PAE201287	42141	78325	YPS002641
18019	54203	CJU100002	30081	66265	PAE201294	42142	78326	YPS002643
18020	54204	CJU100003	30082	66266	PAE201297	42143	78327	YPS002651
18021	54205	CJU100007	30083	66267	PAE201302	42144	78328	YPS002665
18021	54206	CJU100009	30084	66268	PAE201309	42145	78329	YPS002667
18023	54207	CJU100010	30085	66269	PAE201315	42146	78330	YPS002670
18024	54208	CJU100013	30086	66270	PAE201316	42147	78331	YPS002673
18025	54209	CJU100013	30087	66271	PAE201317	42148	78332	YPS002675
18025	54210	CJU100021	30087	66272	PAE201337	42149	78333	YPS002684
18020	54211	CJU100023	30088	66273	PAE201341	42150	78334	YPS002690
18027	54211	CJU100024	30099	66274	PAE201365	42151	78334	YPS002693
18028	54212	CJU100027 CJU100028	30090	66275	PAE201374	42152	78336	YPS002695
18029	54214	CJU100028	30091	66276	PAE201374 PAE201382	42152	78330 78337	YPS002721
18030	54214	CJU100033	30092	66277	PAE201382	42154	78337	YPS002721
18031	54216	CJU100039 CJU100041	30093	66278	PAE201383	42155	78339	YPS002734
18032	54217	ĊJU100041	30094	66279	PAE201420	42156	78340	YPS002735
18033	54217	CJU100042	30093	66280	PAE201420 PAE201432	42150	78340	YPS002741
18034	54218 54219	CJU100043	30090	66281	PAE201432 PAE201448	42157	78341 78342	YPS002753
10022	34413	CJ C 100040	30031	00201	1 1312401440	42130	10342	77700077

WO 02/077183 PCT/US02/091

	02/07/103							
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID		SeqID	\mathbf{SeqID}	
10026	54220	CIT 11 00 0 4 7	20000	66282	PAE201450	42159	78343	YPS002755
18036	54220	CJU100047	30098		PAE201455	42159	78344	YPS002768
18037	54221	CJU100058	30099	66283	PAE201455 PAE201456		7834 4 78345	
18038	54222	CJU100060	30100	66284		42161		YPS002772
18039	54223	CJU100066	30101	66285	PAE201475	42162	78346	YPS002774
18040	54224	CJU100072	30102	66286	PAE201490	42163	78347	YPS002776
18041	54225	CJU100083	30103	66287	PAE201495	42164	78348	YPS002778
18042	54226	CJU100084	30104	66288	PAE201497	42165	78349	YPS002784
18043	54227	CJU100085	30105	66289	PAE201499	42166	78350	YPS002785
18044	54228	CJU100089	30106	66290	PAE201500	42167	78351	YPS002788
18045	54229	CJU100091	30107	66291	PAE201504	42168	78352	YPS002793
18046	54230	CJU100094	30108	66292	PAE201520	42169	78353	YPS002805
18047	54231	CJU100103	30109	66293	PAE201522	42170	78354	YPS002809
18048	54232	СJU100105	30110	66294	PAE201526	42171	78355	YPS002811
18049	54233	СJU100106	30111	66295	PAE201527	42172	78356	YPS002814
18050	54234	CJU100112	30112	66296	PAE201528	42173	78357	YPS002815
18051	54235	CJU100114	30113	66297	PAE201531	42174	78358	YPS002837
18052	54236	CJU100115	30114	66298	PAE201532	42175	78359	YPS002852
18053	54237	CJU100116	30115	66299	PAE201533	42176	78360	YPS002860
18054	54238	CJU100121	30116	66300	PAE201553	42177	78361	YPS002861
18055	54239	CJU100123	30117	66301	PAE201575	42178	78362	YPS002874
18056	54240	CJU100125	30118	66302	PAE201579	42179	78363	YPS002878
18057	54241	CJU100139	30119	66303	PAE201582	42180	78364	YPS002886
18058	54242	CJU100143	30120	66304	PAE201584	42181	78365	YPS002899
18059	54243	CJU100144	30121	66305	PAE201586	42182	78366	YPS002910
18060	54244	CJU100145	30122	66306	PAE201588	42183	78367	YPS002920
18061	54245	CJU100148	30123	66307	PAE201595	42184	78368	YPS002921
18062	54246	CJU100150	30124	66308	PAE201613	42185	78369	YPS002930
18063	54247	CJU100163	30125	66309	PAE201624	42186	78370	YPS002939
18064	54248	CJU100171	30126	66310	PAE201627	42187	78371	YPS002942
18065	54249	CJU100185	30127	66311	PAE201642	42188	78372	YPS002946
18066	54250	CJU100186	30128	66312	PAE201648	42189	78373	YPS002950
18067	54251	CJU100189	30129	66313	PAE201652	42190	78374	YPS002953
18068	54252	CJU100192	30130	66314	PAE201680	42191	78375	YPS002957
18069	54253	CJU100194	30131	66315	PAE201688	42192	78376	YPS002958
18070	54254	CJU100195	30132	66316	PAE201706	42193	78377	YPS002961
18071	54255	CJU100200	30133	66317	PAE201725	42194	78378	YPS002962
18072	54256	CJU100202	30134	66318	PAE201737	42195	78379	YPS002977
18073	54257	CJU100203	30135	66319	PAE201757	42196	78380	YPS002982
18074	54258	CJU100204	30136	66320	PAE201768	42197	78381	YPS002986
18075	54259	СJU100206	30137	66321	PAE201778	42198	78382	YPS002988
18076	54260	CJU100207	30138	66322	PAE201779	42199	78383	YPS002993
18077	54261	CJU100211	30139	66323	PAE201780	42200	78384	YPS002994
18077	54262	CJU100211	30140	66324	PAE201786	42201	78385	YPS002998
18078	54263	CJU100212	30140	66325	PAE201793	42202	78386	YPS002999
18079	54264	CJU100214	30141	66326	PAE201794	42203	78387	YPS003004
18080	54265	CJU100210	30142	66327	PAE201801	42204	78388	YPS003015
18081	54266	CJU100217	30143	66328	PAE201801	42204	78389	YPS003019
18082	54267	CJU100229 CJU100231	30144	66329	PAE201802 PAE201803	42203	78399	YPS003024
18084	54267 54268	CJU100231 CJU100241	30145	66330	PAE201805	42200	78390	YPS003031
18085	54269	CJU100241 CJU100245	30140	66331	PAE201805 PAE201806	42207	78391	YPS003031
18085	54270	CJU100243 CJU100247	30147	66332	PAE201800 PAE201809	42208	78392 78393	YPS003045
18087	54270 54271	CJU100247	30148	66333	PAE201809 PAE201842	42209	78393 78394	YPS003046
18087				66334	PAE201842 PAE201860	42210	7839 4 78395	YPS003054
	54272 54273	CJU100250 CJU100252	30150 30151	66335			78395 78396	YPS003054 YPS003055
18089	54273				PAE201873	42212	78396 78397	
18090	54274	CJU100254	30152	66336	PAE201895	42213	10391	YPS003058

WO 02/077183	PCT/US02/09107
W U U2/U / / 103	PC1/USU2/U91U/

, WU	12/0 / / 103						PC1/050	12/0910/
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID	•	SeqID	SeqID	
18091	54275	СЈU100259	30153	66337	PAE201901	42214	78398	YPS003061
18091	54276	CJU100259 CJU100267	30154	66338	PAE201944	42215	78399	YPS003064
18092	54277	CJU100277	30155	66339	PAE201946	42216	78400	YPS003067
18093	54278	CJU100272	30156	66340	PAE201982	42217	78401	YPS003070
18095	54279	CJU100276	30157	66341	PAE201989	42218	78402	YPS003072
18096	54280	CJU100270	30158	66342	PAE201999	42219	78403	YPS003073
18097	54281	CJU100288	30159	66343	PAE202021	42220	78404	YPS003083
18098	54282	CJU100290	30160	66344	PAE202023	42221	78405	YPS003101
18099	54283	CJU100293	30161	66345	PAE202056	42222	78406	YPS003104
18100	54284	CJU100294	30162	66346	PAE202061	42223	78407	YPS003105
18101	54285	CJU100297	30163	66347	PAE202069	42224	78408	YPS003109
18102	54286	CJU100303	30164	66348	PAE202082	42225	78409	YPS003112
18103	54287	CJU100304	30165	66349	PAE202089	42226	78410	YPS003114
18104	54288	CJU100307	30166	66350	PAE202094	42227	78411	YPS003120
18105	54289	CJU100309	30167	66351	PAE202106	42228	78412	YPS003121
18106	54290	CJU100311	30168	66352	PAE202110	42229	78413	YPS003123
18107	54291	CJU100315	30169	66353	PAE202112	42230	78414	YPS003126
18108	54292	CJU100317	30170	66354	PAE202130	42231	78415	YPS003127
18109	54293	CJU100317	30171	66355	PAE202140	42232	78416	YPS003128
18110	54294	CJU100326	30172	66356	PAE202150	42233	78417·	YPS003130
18111	54295	CJU100328	30172	66357	PAE202177	42234	78418	YPS003132
18112	54296	CJU100334	30174	66358	PAE202198	42235	78419	YPS003133
18113	54297	CJU100335	30175	66359	PAE202201	42236	78420	YPS003134
18114	54298	CJU100336	30176	66360	PAE202208	42237	78421	YPS003137
18115	54299	CJU100338	30177	66361	PAE202216	42238	78422	YPS003142
18116	54300	CJU100346	30178	66362	PAE202235	42239	78423	YPS003144
18117	54301	CJU100350	30179	66363	PAE202240	42240	78424	YPS003145
18118	54302	CJU100351	30180	66364	PAE202246	42241	78425	YPS003149
18119	54303	CJU100352	30181	66365	PAE202247	42242	78426	YPS003159
18120	54304	CJU100354	30182	66366	PAE202248	42243	78427	YPS003161
18121	54305	CJU100356	30183	66367	PAE202270	42244	78428	YPS003163
18122	54306	CJU100357	30184	66368	PAE202275	42245	78429	YPS003165
18123	54307	CJU100360	30185	66369	PAE202320	42246	78430	YPS003166
18124	54308	CJU100361	30186	66370	PAE202326	42247	78431	YPS003168
18125	54309	CJU100369	30187	66371	PAE202335	42248	78432	YPS003182
18126	54310	CJU100370	30188	66372	PAE202336	42249	78433	YPS003183
18127	54311	CJU100372	30189	66373	PAE202339	42250	78434	YPS003184
18128	54312	CJU100373	30190	66374	PAE202340	42251	78435	YPS003193
18129	54313	CJU100381	30191	66375	PAE202349	42252	78436	YPS003204
18130	54314	CJU100383	30192	66376	PAE202352	42253	78437	YPS003206
18131	54315	CJU100388	30193	66377	PAE202357	42254	78438	YPS003214
18132	54316	CJU100394	30194	66378	PAE202398	42255	78439	YPS003216
18133	54317	CJU100398	30195	66379	PAE202399	42256	78440	YPS003220
18134	54318	CJU100400	30196	66380	PAE202420	42257	78441	YPS003221
18135	54319	CJU100401	30197	66381	PAE202428	42258	78442	YPS003223
18136	54320	CJU100403	30198	66382	PAE202441	42259	78443	YPS003230
18137	54321	CJU100408	30199	66383	PAE202464	42260	78444	YPS003231
18138	54322	CJU100409	30200	66384	PAE202524	42261	78445	YPS003233
18139	54323	CJU100410	30201	66385	PAE202526	42262	78446	YPS003236
18140	54324	CJU100411	30202	66386	PAE202533	42263	78447	YPS003242
18141	54325	CJU100415	30203	66387	PAE202534	42264	78448	YPS003243
18142	54326	CJU100425	30204	66388	PAE202537	42265	78449	YPS003245
18143	54327	CJU100430	30205	66389	PAE202538	42266	78450	YPS003251
18144	54328	CJU100435	30206	66390	PAE202540	42267	78451	YPS003252
18145	54329	CJU100436	30207	66391	PAE202547	42268	78452	YPS003253

WO 02/077102	DCT/IIC02/00107
WO 02/077183	PCT/US02/09107

***	72/07/103	_			_		1 € 17050	2/05107
DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID	DNA	Protein	Gene LocusID
SeqID	SeqID		SeqID	SeqID		SeqID	SeqID	
18146	54330	CJU100438	30208	66392	PAE202561	42269	78453	YPS003254
18147	54331	CJU100439	30209	66393	PAE202571	42270	78454	YPS003258
18148	54332	CJU100440	30210	66394	PAE202586	42271	78455	YPS003261
18149	54333	СЈU100441	30211	66395	PAE202605	42272	78456	YPS003264
18150	54334	CJU100442	30212	66396	PAE202609	42273	78457	YPS003266
	54335	CJU100442	30212	66397	PAE202610	42274	78458	YPS003267
18151								
18152	54336	CJU100444	30214	66398	PAE202611	42275	78459	YPS003268
18153	54337	CJU100448	30215	66399	PAE202613	42276	78460	YPS003269
18154	54338	CJU100451	30216	66400	PAE202617	42277	78461	YPS003272
18155	54339	CJU100453	30217	66401	PAE202621	42278	78462	YPS003275
18156	54340	CJU100455	30218	66402	PAE202624	42279	78463	YPS003280
18157	54341	CJU100456	30219	66403	PAE202627	42280	78464	YPS003282
18158	54342	CJU100457	30220	66404	PAE202664	42281	78465	YPS003285
18159	54343	CJU100458	30221	66405	PAE202698	42282	78466	YPS003289
18160	54344	CJU100460	30222	66406	PAE202707	42283	78467	YPS003291
	54345	CJU100463	30222	66407	PAE202730	42284	78468	YPS003294
18161								
18162	54346	CJU100467	30224	66408	PAE202732	42285	78469	YPS003297
18163	54347	CJU100469	30225	66409	PAE202733	42286	78470	YPS003304
18164	54348	CJU100471	30226	66410	PAE202737	42287	78471	YPS003321
18165	54349	CJU100472	30227	66411	PAE202738	42288	78472	YPS003325
18166	54350	CJU100479	30228	66412	PAE202741	42289	78473	YPS003326
18167	54351	CJU100481	30229	66413	PAE202742	42290	78474	YPS003330
18168	54352	CJU100484	30230	66414	PAE202747	42291	78475	YPS003331
18169	54353	CJU100487	30231	66415	PAE202793	42292	78476	YPS003334
18170	54354	CJU100496	30232	66416	PAE202794	42293	78477	YPS003339
18171	54355	CJU100503	30232	66417	PAE202798	42294	78478	YPS003344
18172	54356	CJU100504	30233	66418	PAE202800	42295	78479	YPS003346
18173	54357	CJU100505	30235	66419	PAE202808	42296	78480	YPS003348
18174	54358	CJU100507	30236	66420	PAE202838	42297	78481	YPS003349
18175	54359	СЈU100519	30237	66421	PAE202854	42298	78482	YPS003356
18176	54360	CJU100520	30238	66422	PAE202921	42299	78483	YPS003357
18177	54361	CJU100524	30239	66423	PAE202922	42300	78484	YPS003367
18178	54362	CJU100533	30240	66424	PAE202929	42301	78485	YPS003368
18179	54363	СЈU100534	30241	66425	PAE202951	42302	78486	YPS003371
18180	54364	CJU100535	30242	66426	PAE202957	42303	78487	YPS003373
18181	54365	CJU100536	30243	66427	PAE202959	42304	78488	YPS003375
18182	54366	CJU100537	30244	66428	PAE202960	42305	78489	YPS003376
18183	54367	CJU100538	30245	66429	PAE202962	42306	78490	YPS003380
18184	54368	CJU100543	30246	66430	PAE202963	42307	78491	YPS003382
	54369	CJU100546	30240	66431	PAE202964	42308	78492	YPS003384
18185								
18186	54370	CJU100547	30248	66432	PAE202965	42309	78493	YPS003387
18187	54371	CJU100550	30249	66433	PAE202966	42310	78494	YPS003389
18188	54372	CJU100558	30250	66434	PAE202970	42311	78495	YPS003399
18189	54373	СЈU100562	30251	66435	PAE202974	42312	78496	YPS003402
18190	54374	CJU100565	30252	66436	PAE202975	42313	78497	YPS003406
18191	54375	CJU100575	30253	66437	PAE202976	42314	78498	YPS003414
18192	54376	CJU100577	30254	66438	PAE202988	42315	78499	YPS003417
18193	54377	CJU100584	30255	66439	PAE203000	42316	78500	YPS003419
18194	54378	CJU100586	30256	66440	PAE203012	42317	78501	YPS003420
18195	54379	CJU100580	30257	66441	PAE203021	42317	78501 78502	YPS003421
18196	54380	CJU100593	30258	66442	PAE203026	42319	78503	YPS003424
18197	54381	СЛИ100594	30259	66443	PAE203027	42320	78504	YPS003425
18198	54382	CJU100600	30260	66444	PAE203032	42321	78505	YPS003432
18199	54383	CJU100601	30261	66445	PAE203042	42322	78506	YPS003443
18200	54384	CJU100602	30262	66446	PAE203081	42323	78507	YPS003446

DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID
18201	54385	CJU100605	30263	66447	PAE203086	42324	78508	YPS003447
18202	54386	CJU100617	30264	66448	PAE203102	42325	78509	YPS003448
18203	54387	CJU100619	30265	66449	PAE203103	42326	78510	YPS003452
18204	54388	CJU100620	30266	66450	PAE203110	42327	78511	YPS003454
18205	54389	CJU100622	30267	66451	PAE203113	42328	78512	YPS003458
18206	54390	CJU100624	30268	66452	PAE203114	42329	78513	YPS003462
18207	54391	CJU100628	30269	66453	PAE203132	42330	78514	YPS003466
18208	54392	CJU100629	30270	66454	PAE203139	42331	78515	YPS003469
18209	54393	СЛИ100636	30271	66455	PAE203146	42332	78516	YPS003474
18210	54394	CJU100638	30272	66456	PAE203155	42333	78517	YPS003477
18211	54395	CJU100643	30273	66457	PAE203160	42334	78518	YPS003478
18212	54396	CJU100645	30274	66458	PAE203161	42335	78519	YPS003483
18213	54397	CJU100646	30275	66459	PAE203166	42336	78520	YPS003494
18214	54398	CJU100649	30276	66460	PAE203177	42337	78521	YPS003496
18215	54399	CJU100651	30277	66461	PAE203193	42338	78522	YPS003498
18216	54400	CJU100654	30278	66462	PAE203199	42339	78523	YPS003500
18217	54401	СЈU100659	30279	66463	PAE203203	42340	78524	YPS003502
18218	54402	CJU100660	30280	66464	PAE203206	42341	78525	YPS003510
18219	54403	CJU100661	30281	66465	PAE203208	42342	78526	YPS003517
18220	54404	CJU100662	30282	66466	PAE203256	42343	78527	YPS003520
18221	54405	CJU100663	30283	66467	PAE203264	42344	78528	YPS003522
18222	54406	CJU100664	30284	66468	PAE203270	42345	78529	YPS003528
18223	54407	CJU100668	30285	66469	PAE203277	42346	78530	YPS003531
18224	54408	CJU100669	30286	66470	PAE203294 PAE203299	42347 42348	78531 78532	YPS003539 YPS003542
18225	54409 54410	CJU100672 CJU100675	30287 30288	66471 66472	PAE203299 PAE203301	42348	78532 78533	YPS003544
18226 18227	54411	CJU100673	30288	66473	PAE203301 PAE203302	42349	78534	YPS003545
18228	54412	CJU100698	30289	66474	PAE203302	42351	7853 4 7853 5	YPS003546
18229	54413	CJU100098 CJU100702	30290	66475	PAE203303	42351	7853 <i>5</i> 7853 <i>6</i>	YPS003547
18230	54414	CJU100702	30291	66476	PAE203342	42353	78537	YPS003552
18231	54415	CJU100705	30293	66477	PAE203357	42354	78538	YPS003553
18232	54416	CJU100709	30294	66478	PAE203386	42355	78539	YPS003556
18233	54417	CJU100710	30295	66479	PAE203414	42356	78540	YPS003559
18234	54418	CJU100711	30296	66480	PAE203415	42357	78541	YPS003562
18235	54419	CJU100712	30297	66481	PAE203450	42358	78542	YPS003580
18236	54420	CJU100714	30298	66482	PAE203457	42359	78543	YPS003605
18237	54421	CJU100728	30299	66483	PAE203459	42360	78544	YPS003633
18238	54422	CJU100729	30300	66484	PAE203468	42361	78545	YPS003640
18239	54423	CJU100732	30301	66485	PAE203480	42362	78546	YPS003644
18240	54424	CJU100734	30302	66486	PAE203501	42363	78547	YPS003651
18241	54425	CJU100735	30303	66487	PAE203514	42364	78548	YPS003677
18242	54426	CJU100737	30304	66488	PAE203515	42365	78549	YPS003683
18243	54427	CJU100740	30305	66489	PAE203525	42366	78550	YPS003696
18244	54428	CJU100741	30306	66490	PAE203552	42367	78551	YPS003702
18245	54429	CJU100742	30307	66491	PAE203556	42368	78552	YPS003731
18246	54430	CJU100744	30308	66492	PAE203557	42369	78553	YPS003739
18247	54431	CJU100749	30309	66493	PAE203558	42370	78554	YPS003752
18248	54432	CJU100751	30310	66494	PAE203560	42371	78555	YPS003775
18249	54433	CJU100756	30311	66495	PAE203565	42372	78556	YPS003777
18250	54434	CJU100760	30312	66496	PAE203579	42373	78557	YPS003792
18251	54435	СЛU100763	30313	66497	PAE203580	42374	78558	YPS003815
18252	54436	CJU100766	30314	66498	PAE203588	42375	78559	YPS003822
18253	54437	CJU100774	30315	66499	PAE203595	42376	78560	YPS003891
18254	54438	CJU100775	30316	66500	PAE203599	42377	78561	YPS003904
18255	54439	CJU100777	30317	66501	PAE203600	42378	78562	YPS003930

DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID
18256	54440	CJU100788	30318	66502	PAE203601	42379	78563	YPS003983
18257	54441	CJU100795	30319	66503	PAE203612	42380	78564	YPS004039
18258	54442	CJU100797	30320	66504	PAE203614	42381	78565	YPS004144
18259	54443	CJU100799	30321	66505	PAE203615	42382	78566	YPS004146
18260	54444	CJU100801	30322	66506	PAE203618	42383	78567	YPS004171
18261	54445	CJU100802	30323	66507	PAE203625	42384	78568	YPS004196
18262	54446	CJU100805	30324	66508	PAE203626	42385	78569	YPS004197
18263	54447	CJU100815	30325	66509	PAE203631	42386	78570	YPS004214
18264	54448	CJU100816	30326	66510	PAE203633	42387	78571	YPS004281
18265	54449	CJU100817	30327	66511	PAE203634	42388	78572	YPS004286
18266	54450	CJU100819	30328	66512	PAE203635	42389	78573	YPS004652
18267	54451	CJU100824	30329	66513	PAE203637	42390	78574	YPS005092
18268	54452	CJU100827	30330	66514	PAE203638	42391	78575	YPS005095
18269	54453	CJU100828	30331	66515	PAE203640	42392	78576	YPS005126
18270	54454	CJU100833	30332	66516	PAE203643	42393	78577	YPS005201
18271	54455	CJU100835	30333	66517	PAE203644	42394	78578	YPS005574
18272	54456	СЈU100836	30334	66518	PAE203650	42395	78579	YPS005860
18273	54457	CJU100842	30335	66519	PAE203651	42396	78580	YPS006083
18274	54458	СJU100843	30336	66520	PAE203652	42397	78581	YPS006344
18275	54459	СJU100845						

5

10

15

20

It will be appreciated that ORFs may also be identified using databases other than PathoSeq. For example, the ORFs may be identified using the methods described in U.S. Provisional Patent Application Serial Number 60/191,078, filed March 21, 2000.

EXAMPLE 4

Transfer of Exogenous Nucleic Acid Sequences to other Bacterial Species

The ability of an antisense molecule identified in a first organism to inhibit the proliferation of a second organism (thereby confirming that a gene in the second organism which is homologous to the gene from the first organism is required for proliferation of the second organism) was validated using antisense nucleic acids which inhibit the growth of *E. coli* which were identified using methods similar to those described above. Expression vectors which inhibited growth of *E. coli* upon induction of antisense RNA expression with IPTG were transformed directly into *Enterobacter cloacae*, *Klebsiella pneumonia* or *Salmonella typhimurium*. The transformed cells were then assayed for growth inhibition according to the method of Example 1. After growth in liquid culture, cells were plated at various serial dilutions and a score determined by calculating the log difference in growth for INDUCED vs. UNINDUCED antisense RNA expression as determined by the maximum 10 fold dilution at which a colony was observed. The results of these experiments are listed below in Table II. If there was no effect of antisense RNA expression in a microorganism, the clone is minus in Table II. In contrast, a positive in Table II means that at least 10 fold more cells were required to observe a colony on the induced plate than on the non-induced plate under the conditions used and in that microorganism.

<u>TABLE II</u>

<u>Sensitivity of Other Microorganisms to Antisense Nucleic Acids That Inhibit Proliferation in E. coli</u>

Mol. No.	S. typhimurium	E. cloacae	K. pneumoniae
EcXA001	+	+	
EcXA004	+	-	-
EcXA005	+	+	+
EcXA006	-	-	-
EcXA007	-	. +	-
EcXA008	+	-	+
EcXA009	-	-	-
EcXA010	+	+	+
EcXA011	-	+	-
EcXA012	-	+	-
EcXA013	+	+	+
EcXA014	+	+	-
EcXA015	+	+	+
EcXA016	+	+	+
EcXA017	+	+	+
EcXA018	+	+	+
EcXA019	+	- +	+
EcXA020	+	+	+
EcXA021	+	+	+
EcXA023	+	+	+
EcXA024	+	••	+

		if there if it is	" tunit limil flom ti theelt dit melle florit
EcXA025	-	-	- and the court of the court
EcXA026	+ .	+	-
EcXA027	+	* +	-
EcXA028	+	-	-
EcXA029	-	-	_
EcXA030	+	+	+
EcXA031	+	-	-
EcXA032	+	+	-
EcXA033	+	+	+
EcXA034	+	+	+
EcXA035	-	-	-
EcXA036	+	-	+ .
EcXA037	+	+	-
EcXA038	+	+	+
EcXA039	+	-	-
EcXA041	+	+	+
EcXA042		+	+
EcXA043		-	-
EcXA044	_	-	-
EcXA045	+ ·	+	+
EcXA046	-	_	-
EcXA047	+	+	-
EcXA048	-	-	-
EcXA049	+	-	_
EcXA050	_	-	-
EcXA051	+	_	_
EcXA051 EcXA052	+	-	_
EcXA052	+	+	+
EcXA054		-	+
EcXA055	+		
EcXA056	+	-	+
EcXA057	+	+	•••
EcXA058	 		
	+	+	+
EcXA059	 	 	-
EcXA060	-	-	
EcXA061	-	-	-
EcXA062	-	+	_
EcXA063	+		-
EcXA064	-	+	-
EcXA065	+ '		-
EcXA066			
EcXA067	-	+	**
EcXA068	-		-
EcXA069	-	+	-
EcXA070	-	-	-
EcXA071	+	-	-
EcXA072	+	-	+
EcXA073	+	+	+
EcXA074	+	+	+
EcXA075	+	-	-
EcXA076	-	+	

			1 torell freel Hours et fterell att entler flecell
EcXA077	+	+ """ "	om (1996) Dayers () Steeds all spellar dasels
EcXA079	+	+	+
EcXA080	+	•	
EcXA082	- ,	+	-
EcXA083	•	-	-
EcXA084	-	+	.
EcXA086	-	-	
EcXA087	-	-	
EcXA088	-	-	-
EcXA089	-	-	-
EcXA090	-	•	-
EcXA091	-	_	-
EcXA092	-	-	-
EcXA093	-	-	-
EcXA094	+	+	+
EcXA095	+	+	-
EcXA096		-	
EcXA097	+	<u> </u>	-
EcXA098	+	-	-
EcXA099	_	<u></u>	-
EcXA100		<u> </u>	-
EcXA101	_		-
EċXA102	_	_	-
EcXA103		+	
EcXA104	+	+	+
EcXA104	+	+	-
EcXA100	-		_
EcXA107		-	_
EcXA108			_
EcXA110	+	+	_
EcXA110 EcXA111	<u> </u>	<u> </u>	_
EcXA111 EcXA112		+	_
EcXA113	+	+	+
EcXA113 EcXA114	•	+	
		+	
EcXA115	+	+	
EcXA116	+		-
EcXA117 EcXA118		_	
EcXA118 EcXA119	+	+	-
			-
EcXA120	-	-	
EcXA121			+
EcXA122	+	-	
EcXA123	+	-	-
EcXA124	-	-	-
EcXA125	-	-	-
EcXA126	-		-
EcXA127	+	+	-
EcXA128	-	-	-
EcXA129	-	+	- '
EcXA130	+	+	-
EcXA132	-	-	-

		11 mm - 12 - 12 - 12 - 14 - 14 - 14 - 14 - 14	
EcXA133	-	n dada n n an	ar and their them of their act with their
EcXA136	-	-	**
EcXA137	-		
EcXA138	+	-	-
EcXA139			-
EcXA140	+	-	-
EcXA141	+	-	-
EcXA142	-	-	-
EcXA143	—	+	***
EcXA144	+	+	•
EcXA145	=	200	•
EcXA146		-	•
EcXA147	-	-	• .
EcXA148	_		-
EcXA149	+	+	+
EcXA150	-	_	-
EcXA151	+	_	-
EcXA151 EcXA152			_
EcXA152 EcXA153	+	+	_
EcXA154		<u> </u>	_
EcXA155			ND
EcXA156	-	+	
EcXA157	-	_	
EcXA158		_	-
EcXA158 EcXA159	+		
EcXA159 EcXA160	+		
	 	<u> </u>	-
EcXA162	-		_
EcXA163	-	-	<u> </u>
EcXA164	-	-	-
EcXA165	-	-	
EcXA166	-		
EcXA167	-	-	-
EcXA168	-	+	-
EcXA169	-	T	<u>-</u>
EcXA171	-	-	-
EcXA172	-	-	-
EcXA173	-	-	-
EcXA174	-	-	-
EcXA175	-		•
EcXA176	-	-	-
EcXA178	-	-	-
EcXA179	-	•	-
EcXA180	+	•	-
EcXA181	<u> </u>		-
EcXA182	-	-	-
EcXA183	-	-	-
EcXA184	-		-
EcXA185	_	-	<u>-</u>
EcXA186	-	-	-
EcXA187	+	+	+
EcXA189	+ .	-	-

5

10

15

20

25

30

35

			1. "cold" "could france at Bereit anti' coeller fageld at
EcXA190	+	+	+
EcXA191	+	+	-
EcXA192	-	+	-

Thus, the ability of an antisense nucleic acid which inhibits the proliferation of Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium. Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis to inhibit the growth of other organims may be evaluated by transforming the antisense nucleic acid directly into species other than the organism from which they were obtained. In particular, the ability of the antisense nucleic acid to inhibit the growth of Acinetobacter baumannii, Anaplasma marginale, Aspergillus fumigatus, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Candida albicans, Candida glabrata (also called Torulopsis glabrata), Candida tropicalis, Candida parapsilosis, Candida guilliermondii, Candida krusei, Candida kefyr (also called Candida pseudotropicalis), Candida dubliniensis, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Clostridium perfringens, Coccidioides immitis, Corynebacterium diptheriae, Cryptococcus neoformans, Enterobacter cloacae, Enterococcus faecalis, Enterococcus faecium, Escherichia coli, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria Klebsiella pneumoniae, Histoplasma capsulatum, avium, Mycobacterium Moraxella catarrhalis, Mycobacterium monocytogenes, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Nocardia asteroides, Pasteurella haemolytica, Pasteurella multocida, Pneumocystis carinii, Proteus mirabilis, Proteus vulgaris, Pseudomonas aeruginosa, Pseudomonas putida, Pseudomonas syringae, Salmonella bongori, Salmonella cholerasuis, Salmonella enterica, Salmonella paratyphi, Salmonella typhi, Salmonella typhimurium, Shigella boydii, Shigella dysenteriae, Shigella flexneri, Shigella sonnei, Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus pneumoniae, Streptococcus mutans, Streptococcus pyogenes, Treponema pallidum, Ureaplasma

5

10

15

20

25

30

35

urealyticum, Vibrio cholerae, Vibrio parahaemolyticus, Vibrio vulnificans, Yersinia enterocollitica, Yersinia pestis or any species falling within the genera of any of the above species may be evaluated. In some embodiments of the present invention, the ability of the antisense nucleic acid to inhibit the growth of an organism other than E. coli may be evaluated. In such embodiments, the antisense nucleic acids are inserted into expression vectors functional in the organisms in which the antisense nucleic acids are evaluated.

It will be appreciated that the above methods for evaluating the ability of an antisense nucleic acid to inhibit the proliferation of a heterologous organism may be performed using antisense nucleic acids complementary to any of the proliferation-required nucleic acids from Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis (including antisense nucleic acids complementary to SEQ ID NOs.: 6214-42397, such as the antisense nucleic acids of SEQ ID NOs.: 1-6213) or portions thereof, antisense nucleic acids complementary to homologous coding nucleic acids or portions thereof, or homologous antisense nucleic acids.

Those skilled in the art will appreciate that a negative result in a heterologous cell or microorganism does not mean that that cell or microorganism is missing that gene nor does it mean that the gene is unessential. However, a positive result means that the heterologous cell or microorganism contains a homologous gene which is required for proliferation of that cell or microorganism. The homologous gene may be obtained using the methods described herein. For example, the homologous gene may be isolated by performing a PCR procedure using primers based on the antisense sequence which reduced the level or activity of the gene product encoded by the homologous gene or by performing a Southern blot. Those cells that are inhibited by antisense may be used in cell-based assays as described herein for the identification and characterization of compounds in order to develop antibiotics effective in these cells or microorganisms.

Those skilled in the art will appreciate that an antisense molecule which works in the microorganism from which it was obtained will not always work in a heterologous cell or microorganism.

5

10

15

20 ·

25

30

35

Transfer of Exogenous Nucleic Acid Sequences to Other Bacterial Species Using the Escherichia coli,
Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa,
Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis,
Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum,
Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis,
Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium
diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter
pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium
avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma
genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella
multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi,
Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus
mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma
urealyticum, Vibrio cholerae or Yersinia pestis Expression Vectors or Expression Vectors Functional
in Bacterial Species Other Than the Foregoing Bacterial Species

The antisense nucleic acids that inhibit the growth of Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis, or portions thereof, may also be evaluated for their ability to inhibit the growth of cells or microorganisms other than Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium,

5

10

15

20

25

30

35

Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoblasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis. For example, the antisense nucleic acids that inhibit the growth of Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis may be evaluated for their ability to inhibit the growth of other organisms. In particular, the ability of the antisense nucleic acid to inhibit the growth of Acinetobacter baumannii, Anaplasma marginale, Aspergillus fumigatus, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Candida albicans, Candida glabrata (also called Torulopsis glabrata), Candida tropicalis, Candida parapsilosis, Candida guilliermondii, Candida krusei, Candida kefyr (also called Candida pseudotropicalis), Candida dubliniensis, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Clostridium perfringens, Coccidioides immitis, Corynebacterium diptheriae, Cryptococcus neoformans, Enterobacter cloacae, Enterococcus faecalis, Enterococcus faecium, Escherichia coli, Haemophilus influenzae, Helicobacter pylori, Histoplasma capsulatum, Klebsiella Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Nocardia asteroides, Pasteurella haemolytica, Pasteurella multocida, Pneumocystis carinii, Proteus mirabilis, Proteus vulgaris, Pseudomonas aeruginosa, Pseudomonas putida, Pseudomonas syringae, Salmonella bongori, Salmonella cholerasuis, Salmonella enterica, Salmonella paratyphi, Salmonella typhi, Salmonella typhimurium, Shigella boydii, Shigella dysenteriae, Shigella flexneri, Shigella sonnei, Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus haemolyticus,

5

10

15

20

25

30

35

Streptococcus pneumoniae, Streptococcus mutans, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae, Vibrio parahaemolyticus, Vibrio vulnificans, Yersinia enterocolitica, Yersinia pestis or any species falling within the genera of any of the above species may be evaluated. In some embodiments of the present invention, the ability of the antisense nucleic acid to inhibit the growth of an organism other than E. coli may be evaluated.

In such methods, expression vectors in which the expression of an antisense nucleic acid that inhibits the growth of Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, monocytogenes. Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio choleraei or Yersinia pestisis under the control of an inducible promoter are introduced into the cells or microorganisms in which they are to be evaluated. In some embodiments, the antisense nucleic acids may be evaluated in cells or microorganisms which are closely related to Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis. The ability of these antisense nucleic acids to inhibit the growth of the related cells or microorganisms in the presence of the inducer is then measured.

5

10

15

20

25

30

Identification of Nucleic Acids Homologous to Nucleic Acids Required for the Proliferation of Staphylococcus aureus in other Bacterial Species

Nucleic acids homologous to proliferation-required nucleic acids from *Staphylococcus aureus* were identified as follows. For example, thirty-nine antisense nucleic acids which inhibited the growth of *Staphylococcus aureus* were identified using methods such as those described herein and were inserted into an expression vector such that their expression was under the control of a xylose-inducible Xyl-T5 promoter. A vector with a reporter gene under control of the Xyl-T5 promoter was used to show that expression from the Xyl-T5 promoter in *Staphylococcus epidermidis* was comparable to that in *Staphylococcus aureus*.

The vectors were introduced into *Staphylococcus epidermidis* by electroporation as follows: *Staphylococcus epidermidis* was grown in liquid culture to mid-log phase and then harvested by centrifugation. The cell pellet was resuspended in 1/3 culture volume of ice-cold EP buffer (0.625 M sucrose, 1 mM MgC1₂, pH=4.0), and then harvested again by centrifugation. The cell pellet was then resuspended with 1/40 volume EP buffer and allowed to incubate on ice for 1 hour. The cells were then frozen for storage at -80°C. For electroporation, 50 µl of thawed electrocompetent cells were combined with 0.5 µg plasmid DNA and then subjected to an electrical pulse of 10 kV/cm, 25 uFarads, 200 ohm using a biorad gene pulser electroporation device. The cells were immediately resuspended with 200 µl outgrowth medium and incubated for 2 hours prior to plating on solid growth medium with drug selection to maintain the plasmid vector. Colonies resulting from overnight growth of these platings were selected, cultured in liquid medium with drug selection, and then subjected to dilution plating analysis as described for *Staphylococcus aureus* in Example 1 above to test growth sensitivity in the presence of the inducer xylose.

The results are shown in Table III below. The first column indicates the Molecule Number of the Staphylococcus aureus antisense nucleic acid which was introduced into Staphylococcus epidermidis. The second column indicates whether the antisense nucleic acid inhibited the growth of Staphylococcus epidermidis, with a "+" indicating that growth was inhibited. Of the 39 Staphylococcus aureus antisense nucleic acids evaluated, 20 inhibited the growth of Staphylococcus epidermidis.

TABLE III

Sensitivity of Other Microorganisms to Antisense Nucleic Acids That Inhibit Proliferation of

Staphylococcus aureus

Mol. No.	S. epidermidis
SaXA005	+
SaXA007	+
SaXA008	+
SaXA009	4
SaXA010	+
SaXA011	-

		PCT/US02/09107
SaXA012		The ball willing the American Start and the start the start of
SaXA013	-	
SaXA015	+	
SaXA017	-	
SaXA022	+	
SaXA023	-	
SaXA024	300	
SaXA025	+	
SaXA026	+	•
SaXA027	-	
SaXA027b		
SaXA02c	-	
SaXA028	•	1TE
SaXA029	+	
SaXA030	+	
SaXA032	+	
SaXA033	+	
SaXA034	-	
SaXA035	+	
SaXA037	+	
SaXA039	-	
SaXA042	-	
SaXA043	-	
SaXA044	-	
SaXA045	+	
SaXA051	+	
SaXA053	-	
SaXA056b	-	
SaXA059a	+	
SaXA060	-	
SaXA061	+	
SaXA062	+	
SaXA063	-	
SaXA065	-	

5

10

15

20

25

30

35

Although the results shown above were obtained using a subset of proliferation-required nucleic acids from Staphylococcus aureus, it will be appreciated that similar analyses may be performed using the nucleic acids of the present invention to determine whether they inhibit the proliferation of cells or microorganisms other than Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis.

Thus, it will be appreciated that the above methods for evaluating the ability of an antisense nucleic acid to inhibit the proliferation of a heterologous organism may be performed using antisense nucleic acids complementary to any of the proliferation-required nucleic acids from Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or Yersinia pestis, (including antisense nucleic acids complementary to SEQ ID NOs.: 6214-42397, such as the antisense nucleic acids of SEQ ID NOs.: 1-6213) or portions thereof, antisense nucleic acids complementary to homologous coding nucleic acids or portions thereof, or homologous antisense nucleic acids.

5

10

15

20

25

30

35

EXAMPLE 7 "

Identification of Homologous Nucleic Acids by Functional Complementation

Homologous coding nucleic acids, homologous antisense nucleic acids or nucleic acids encoding homologous polypeptides may be identified as follows. Gene products whose activities may be complemented by a proliferation-required gene product from Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae, Yersinia pestis or homologous polypeptides are identified using merodiploids, created by introducing a plasmid or Bacterial Artificial Chromosome into an organism having a mutation in the essential gene which reduces or eliminates the activity of the gene product. In some embodiments, the mutation may be a conditional mutation, such as a temperature sensitive mutation, such that the organism proliferates under permissive conditions but is unable to proliferate under non-permissive conditions in the absence of complementation by the gene on the plasmid or Bacterial Artificial Chromosome. Alternatively, duplications may be constructed as described in Roth et al. (1987) Biosynthesis of Aromatic Amino Acids in Escherichia coli and Salmonella typhimurium, F. C. Neidhardt, ed., American Society for Microbiology, publisher, pp. 2269-2270. Such methods are familiar to those skilled in the art. Alternatively, homologous coding nucleic acids, homologous antisense nucleic acids or nucleic acids encoding homologous polypeptides may be identified by placing a gene required for proliferation or a nucleic acid complementary to at least a portion of a gene required for proliferation under the control of a regulatable promoter as described above, introducing a plasmid or Bacterial Artificial Chromosome into the cell, and identifying cells which are able to proliferate under conditions which would prevent or reduce proliferation in the absence of the plasmid or Bacterial Artificial Chromosome.

Homologous coding nucleic acids, homologous antisense nucleic acids or nucleic acids encoding homologous polypeptides may be identified using databases as follows.

WO 02/077183 PCT/US02/09107 EXAMPLE 8

5

15

20

25

30

35

Identification of Homologous Nucleic Acids by Database Analysis

As a demonstration of the methodology required to find homologues to an essential gene, fifty-one prokaryotic organisms were analyzed and compared in detail. First, the most reliable source of gene sequences for each organism was assessed by conducting a survey of the public and private data sources. The fifty-one organisms studied are Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter 10 jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria Moraxella catarrhalis, Mycobacterium avium, Mycobacterium monocytogenes, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae and Yersinia pestis. Full-length gene protein and nucleotide sequences for these organisms were assembled from various sources. For Escherichia coli, Haemophilus influenzae and Helicobacter pylori, gene sequences were adopted from the public sequencing projects, and derived from the GenPept 115 database (available from NCBI). For Pseudomonas aeruginosa, gene sequences were adopted from the Pseudomonas genome sequencing project (downloaded from http://www.pseudomonas.com). For Klebsiella pneumoniae, Staphylococcus aureus, Streptococcus pneumoniae and Salmonella typhi, genomic sequences from PathoSeq v 4.1 (Mar 2000 release) were reanalyzed for ORFs using the gene finding software GeneMark v 2.4a, which was purchased from GenePro Inc. 451 Bishop St., N.W., Suite B, Atlanta, GA, 30318, USA. Similar analyses were conducted for the other organisms using publically available and proprietary databases.

Homologous coding nucleic acids and the homologous polypeptides which they encode may be identified using a "reciprocal" best-hit analysis. To facilitate the identification of homologous coding nucleic acids and homologous polypeptides, paralogous genes within each of 51 organisms were identified and clustered prior to comparison to other organisms. Briefly, the polypeptide sequence of each polypeptide encoded by each open reading frame (ORF) in a given organism was compared to the polypeptide sequence encoded by every other ORF for that organism for each of the 51 pathogenic organisms (PathoSeq Sept 2001 release) using BLASTP 2.09 algorithm without filtering. Simultaneously, the polypeptide sequence encoded by each ORF of an organism was compared to the polypeptide sequences encoded by each of the ORFs in the remaining 51 organisms. Those polypeptides within a single organism that shared a higher degree

5

10

15

20

25

of sequence identity to one another than to polypeptide sequences obtained from any other organisms were clustered as "paralog" sequences for "reciprocal" best-hit analysis.

For each reference organism, the 50 homologous coding nucleic acids (and the 50 homologous polypeptides which they encode) was determined by identifying the ORFs in each of the 50 comparison organisms which encode a polypeptide sharing the highest degree of amino acid sequence identity to the polypeptide encoded by the ORF from the reference organism. The accuracy of the identification of the predicted homologous coding nucleic acids (and the homologous polypeptides which they encode) was confirmed by a "reciprocal" BLAST analysis in which the polypeptide sequence of the predicted homologous polypeptide was compared against the polypeptides encoded by each of the ORFS in the reference organism using BLASTP 2.09 algorithm without filtering. Only those polypeptides that share the highest degree of amino acid sequence identity in each portion of the two-way comparison are retained for further analysis.

The best homolog for each of the fifty-one organisms, defined as the most significantly scoring match which also fulfilled the above criteria, was reported in Table IV.

Table IV lists the best ORF identified as described above (column labeled Homolog LocusID) that matches the query sequence (column labeled Query LocusID), % identity between the query sequence and the homolog, and the amount of each sequence that aligns together well (columns labeled Query Coverage and Homolog Coverage) for the gene identified in each of the fifty-one organisms evaluated as described above. As described in connection which Table IC, the Locus IDs (ie. both Query Locus ID and Homolog Locus ID) provided in Table IV each comprise a nine digit alpha-numeric identifier that can be used to determine the organism from which the query and homolog sequences were obtained. Specifically, the first letter of the Locus ID corresponds to the first letter of the genus name of the organism described herein from which the Locus was identified and the second and third letters of the Locus ID correspond to the first two letters of the species name of this organism. For example, the identifier EFA205257 describes a gene locus identified from *Enterococcus faecalis*. In those instances where the three letter identifier is the same for different organisms, the exact identity of the organism which corresponds to the Locus ID can be determined by referring to the organism designation in the sequence listing for the coding nucleic acid or polypeptide SEQ ID NO. that corresponds to the particular Locus ID.

TABLE IV

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100001	ECO100001	100%	100%	100%
ECO100001	STY104800	85%	100%	100%
ECO100001	STM104529	85%	100%	100%
ECO100002	ABA101891	29%	40.9%	80.3%
ECO100002	BAN108126	29%	55.5%	98.5%
ECO100002	BAN105795	30%	55.5%	95.8%
ECO100002	BFR11028	36%	98.9%	99.4%
ECO100002	BPT101425	30%	41.5%	81.7%
ECO100002	BCE111633	28%	42.2%	73.4%
ECO100002	BMA100957	30%	41.3%	82.5%
ECO100002	CJU100543	30%	55.5%	97.8%
ECO100002	CDF100035	25%	5.4%	74.4%
ECO100002	CDF100673	25%	54.9%	96.7%
ECO100002	CDP101634	28%	46.1%	95.7%
ECO100002	EBC103170	92%	70.7%	100%
ECO100002	EFA201386	27%	56.2%	99.8%
ECO100002	ECO100002	100%	100%	100%
ECO100002	HIN100088	62%	99.3%	99.8%
ECO100002	HPY101212	32%	41.8%	83.5%
ECO100002	KPN300246	90%	4.1%	76.7%
ECO100002	KPN302085	92%	100%	100%
ECO100002	LMO102676	27%	57.3%	100%
ECO100002	MCA100888	30%	40.9%	80.3%
ECO100002	MAV103162	26%	55.5%	94.8%
ECO100002	MBV103584	28%	41.0%	79.6%
ECO100002	MLP101383	25%	55.5%	94.8%
ECO100002	MTU203655	28%	41.0%	79.6%
ECO100002	NGO100216	30%	8.9%	4.2%
ECO100002	NME201560	30%	8.9%	4.2%
ECO100002	PMU100113	64%	99.3%	99.8%
ECO100002	PRT104264	76%	100%	100%
ECO100002	PAE200903	30%	4.5%	5.6%
ECO100002	PPU106924	31%	40.9%	80.3%
ECO100002	PSY103112	30%	31.7%	82.0%
ECO100002	SPA100167	93%	39.5%	100%
ECO100002	STY100365	94%	100%	100%
ECO100002	STM100038	94%	100%	100%
ECO100002	SAU801327	26%	56.2%	97.6%
ECO100002	SEP201977	26%	56.2%	98.0%
ECO100002	SHA100755	26%	56.2%	99.8%
ECO100002	SMU100555	25%	56.6%	100%
ECO100002	SPN400374	25%	56.1%	98.7%
ECO100002	. VCH102329	62%	100%	99.3%
ECO100002	YPS000769	81%	100%	100%
ECO100004	BFR11030	47%	85.3%	93.3%
ECO100004	BPT101337	32%	99.8%	99.4%
ECO100004	BCE114764	28%	97.4%	96.9%
ECO100004	BFU101149	29%	94.9%	94.6%
ECO100004	BMA105857	30%	90.4%	95.0%
ECO100004	CJU100751	29%	90.2%	87.2%
ECO100004	CAC103481	28%	99.5%	95.8%
ECO100004	CBO101914	30%	79.9%	86.5%

Query LocusID	Homolog LocusID	Identity	Ouery Coverage	Homolog Coverage
ECO100004	CDF101928	31%	87.9%	85.6%
ECO100004	CDP100440	27%	99.3%	97.9%
ECO100004	EBC102668	92%	80.1%	100%
ECO100004	ECO100004	100%	100%	100%
ECO100004	HIN100086	66%	99.3%	99.5%
ECO100004	HPY100096	28%	89.3%	86.0%
ECO100004	KPN302095	90%	99.3%	99.8%
ECO100004	LPN102575	35%	89.7%	89.8%
EC0100004	MCA103682	29%	99.1%	98.5%
ECO100004	NGO101188	28%	99.1%	98.9%
EC0100004	NME201311	29%	99.1%	98.9%
ECO100004	PMU100115	69%	99.3%	99.8%
EC0100004	PRT104738	78%	99.3%	98.8%
ECO100004	PAE203732	33%	99.8%	98.5%
EC0100004	PPU107824	35%	93.9%	93.2%
ECO100004	PSY103804	34%	99.8%	98.5%
ECO100004	SPA100998	88%	57.0%	100%
	STY100371	93%	100%	100%
ECO100004 ECO100004	STM100044	93%	100%	100%
ECO100004	SMU101311	31%	90.0%	87.2%
	SPN401875	32%	90.2%	87.7%
ECO100004		68%	99.5%	99.5%
ECO100004	VCH102327 YPS000771	83%	99.3%	99.1%
ECO100004	BCE106023	30%	67.3%	35.5%
ECO100005		33%	74.5%	90.3%
ECO100005	BFU106225	31%	61.2%	52.5%
ECO100005	BMA105475		99.0%	100%
ECO100005	EBC102669	57%	100%	100%
ECO100005	ECO100005	38%	53.1%	50.6%
ECO100005	MAV107742		55.1%	23.9%
ECO100005	PAE109842	33% 53%	98.7%	98.1%
ECO100008	BPT101198	56%	99.7%	90.3%
ECO100008	BCE112831	57%	99.7%	99.7%
ECO100008	BFU112516	57%	98.7%	98.7%
ECO100008	BMA101518	27%	55.2%	49.8%
ECO100008	CJU100252			100%
ECO100008	EBC102672	94%	100%	100%
ECO100008	ECO100008	100%	98.7%	98.7%
ECO100008	HIN101098	79%	58.4%	57.9%
ECO100008	HPY101474	28%		100%
ECO100008	KPN302087	91%	100%	41.9%
ECO100008	NME201973	31%	47.0%	98.1%
ECO100008	PMU101639	74%	97.8%	
ECO100008	PMU101602	77%	98.7%	98.7%
ECO100008	PRT104596	86%	100%	
ECO100008	PAE202794	60%	97.8%	97.7%
ECO100008	PPU101750	60%	99.4%	99.4%
ECO100008	PSY102944	. 60%	98.7%	98.4%
ECO100008	SPA100585	92%	62.1%	100%
ECO100008	STY100380	94%	100%	100%
ECO100008	STM100053	94%	100%	100%
ECO100008	SAU504318	30%	30.6%	17.8%
ECO100008	VCH103346	75%	98.7%	98.7%
ECO100008	YPS000773	88%	100%	100%
ECO100009	BPT100950	69%	96.4%	88.9%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100009	BCE102933	73%	96.4%	95.0%
ECO100009	BFU100752	72%	95.4%	88.1%
ECO100009	BMA109380	72%	96.4%	93.2%
ECO100009	CJU100675	50%	95.9%	97.2%
ECO100009	CAC100345	41%	79.5%	90.3%
ECO100009	CBO103886	42%	79.5%	92.0%
ECO100009	CDF101203	35%	78.5%	88.6%
ECO100009	EBC102673	90%	98.5%	98.5%
ECO100009	EFA202344	45%	71.3%	83.8%
ECO100009	ECO100009	100%	100%	100%
ECO100009	HIN100319	79%	96.9%	95.9%
ECO100009	HPY100786	48%	95.9%	99.4%
ECO100009	KPN302084	91%	98.5%	98.5%
ECO100009	MAV104045	37%	75.9%	91.9%
ECO100009	MBV100298	33%	75.9%	90%
ECO100009	MTU200856	33%	75.9%	90%
ECO100009	PMU102003	78%	96.4%	97.9%
ECO100009	PRT105678	82%	99.5%	99.5%
ECO100009	SPA100586	93%	98.5%	98.0%
ECO100009	STY100383	93%	98.5%	98.0%
		91%	98.5%	98.0%
ECO100009	STM100056 YPS000774	87%	100%	100%
ECO100009		100%	100%	100%
ECO100013	ECO100013		98.5%	100%
ECO100013	KPN302079	66%		100%
ECO100013	SPA105546	80%	100%	100%
ECO100013	STY106203	82%	100%	67.2%
ECO100023	ABA106150	60%	92.0%	
ECO100023	BAN103797	50%	96.6%	95.5%
ECO100023	BFR105539	39%	100%	100%
ECO100023	BPT101291	51%	100%	100%
ECO100023	BBU100232	38%	92.0%	74.8%
ECO100023	BCE112030	47%	98.9%	95.6%
ECO100023	BFU100359	51%	98.9%	93.5%
ECO100023	BMA106459	48%	98.9%	93.5%
ECO100023	CJU101517	34%	100%	100%
ECO100023	CPN201099	31%	94.3%	82.8%
ECO100023	CTR200896	33%	88.5%	75.5%
ECO100023	CAC102146	45%	98.9%	97.7%
ECO100023	CBO100245	39%	98.9%	97.7%
ECO100023	CDF101197	41%	96.6%	81.6%
ECO100023	CDP101196	47%	100%	100%
ECO100023	EBC101439	96%	70.1%	100%
ECO100023	EFA200336	48%	92.0%	95.2%
ECO100023	EFM201993	34%	97.7%	100%
ECO100023	ECO100023	100%	100%	100%
ECO100023	HIN100944	72%	100%	97.8%
ECO100023	HPY100074	33%	100%	97.8%
ECO100023	KPN205579	98%	100%	100%
ECO100023	LMO100322	46%	97.7%	100%
ECO100023	MCA100794	56%	98.9%	97.7%
ECO100023	MAV103835	43%	98.9%	100%
ECO100023	MBV104427	41%	98.9%	97.7%
ECO100023	MLP100381	41%	98.9%	100%
ECO100023	MTU202376	43%	98.9%	100%

Query Lo	cusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO1000		MGE100374	30%	97.7%	88.6%
ECO1000		MPN100301	31%	97.7%	89.7%
ECO1000		NGO101642	57%	100%	100%
ECO1000		NME201868	57%	100%	100%
ECO1000		PMU101659	78%	100%	97.8%
ECO1000		PRT102018	83%	98.9%	100%
ECO1000		PAE204561	59%	100%	95.6%
ECO1000		PPU108230	59%	98.9%	93.5%
ECO1000		PSY102689	58%	100%	94.6%
ECO1000		SPA101944	97%	100%	100%
ECO100		STY101095	97%	100%	100%
ECO100		SAU801586	40%	90.8%	94.0%
ECO100		SEP203256	37%	90.8%	90.7%
ECO100		SHA102295	39%	90.8%	94.0%
ECO100		SMU102606	41%	97.7%	92.9%
EC0100		SPN400740	43%	97.7%	94.0%
EC0100		SPY200946	45%	95.4%	98.7%
EC0100		UUR100312	40%	88.5%	83.3%
EC0100		VCH100666	70%	98.9%	100%
		YPS003605	87%	98.9%	98.9%
ECO100		ABA101842	41%	97.8%	97.3%
ECO100		BAN106284	28%	98.1%	99.4%
ECO100			35%	99.4%	97.2%
ECO100		BAN101499			98.1%
ECO100		BFR100412	36%	98.4%	93.1%
ECO100		BPT100434	47%	93.3%	89.0%
ECO100		BCE109423	47%	98.1%	
ECO100		BFU101232	45%	98.1%	92.7%
ECO100		BMA109546	46%	98.1%	89.0%
ECO100		CJU100550	26%	91.4%	91.9%
ECO100		CPN200431	31%	92.0%	90.9%
ECO100		CTR200362	32%	91.1%	93.9%
ECO100		CAC102490	31%	89.8%	92.4%
ECO100		CBO102062	31%	86.3%	97.8%
ECO100		CDF100874	34%	95.5%	94.8%
ECO100	025	CDP100453	30%	94.9%	90.1%
ECO100		EBC100241	84%	56.9%	98.9%
ECO100		EFA200587	31%	94.9%	94.3%
ECO100	025	EFM201219	33%	97.1%	97.4%
ECO100	025	ECO100025	100%	100%	100%
ECO100	025	HIN100942	53%	98.1%	98.1%
ECO100	025	HPY101070	30%	91.4%	93.6%
ECO100	025	KPN300577	. 86%	91.1%	100%
ECO100	025	LPN101116	45%	97.8%	92.7%
ECO100	025	LMO100570	34%	92.3%	92.0%
ECO100	025	MCA100302	41%	93.3%	93.8%
ECO100	025	MAV100301	35%	92.0%	93.5%
ECO100	0025	MBV101247	35%	91.7%	98.4%
ECO100		MLP100513	36%	91.7%	91.2%
ECO100		MTU202748	35%	92.0%	91.5%
ECO100		MGE100147	28%	89.5%	92.9%
ECO100		MPN100673	27%	92.0%	96.7%
ECO100		NGO101768	47%	97.1%	95.3%
ECO100		NME200577	47%	97.1%	95.6%
ECO100		PMU101661	58%	98.1%	98.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100025	PRT105259	67%	97.8%	97.8%
ECO100025	PAE204559	55%	98.1%	98.1%
ECO100025	PPU105777	52%	97.1%	95.9%
ECO100025	PSY102686	52%	97.1%	99.7%
ECO100025	SPA101946	88%	98.7%	100%
ECO100025	STY101100	89%	98.7%	98.7%
ECO100025	STM100815	89%	98.7%	98.7%
ECO100025	SAU801272	34%	97.1%	95.4%
ECO100025	SEP201565	35%	98.7%	96.9%
ECO100025	SHA100170	35%	97.1%	95.4%
ECO100025	SMU100956	36%	91.4%	92.5%
	SPN401017	33%	92.0%	93.4%
ECO100025	SPY200960	32%	96.8%	96.1%
ECO100025		30%	69.6%	80%
ECO100025	TPA100878	26%	87.2%	86.9%
ECO100025	UUR100357		97.1%	94.1%
ECO100025	VCH100668	58%	99.7%	99.7%
ECO100025	YPS000809	75%		
ECO100026	ABA103852	54%	99.8%	100%
ECO100026	BAN106248	37%	92.3%	99.1%
ECO100026	BAN106209	43%	86.5%	
ECO100026	BFR10500	25%	81.1%	79.2%
ECO100026	BPT100432	51%	99.5%	99.6%
ECO100026	BBU100832	26%	81.8%	74.0%
ECO100026	BCE111670	51%	95.3%	97.0%
ECO100026	BFU101230	51%	99.3%	98.4%
ECO100026	BMA102496	43%	98.5%	94.9%
ECO100026	BMA109115	50%	99.6%	98.7%
ECO100026	CJU100989	40%	96.3%	97.4%
ECO100026	CPN200653	26%	81.7%	73.5%
ECO100026	CTR200283	27%	81.0%	73.4%
ECO100026	CAC102765	27%	90.5%	81.7%
ECO100026	CBO100873	30%	55.1%	96.8%
ECO100026	CDF104554	29%	80.0%	72.4%
ECO100026	CDP101247	28%	89.1%	80.5%
ECO100026	EBC102151	92%	98.2%	100%
ECO100026	EFA202160	44%	98.1%	97.8%
ECO100026	EFM201425	44%	98.5%	98.1%
ECO100026	ECO100026	100%	100%	100%
ECO100026	HPY101401	39%	98.5%	99.2%
ECO100026	KPN300290	95%	4.7%	100%
ECO100026	KPN306610	92%	98.3%	100%
ECO100026	LPN101832	55%	99.9%	99.9%
ECO100026	LMO101679	43%	98.7%	99.2%
ECO100026	MCA103671	52%	0.9%	16.5%
ECO100026	MAV103388	27%	83.7%	74.6%
ECO100026	MBV102555	28%	82.3%	75.3%
ECO100026	MLP100743	24%	89.0%	80.8%
ECO100026	MTU201515	28%	82.3%	75.3%
ECO100026	MGE100354	32%	98.3%	99.4%
ECO100026	MPN100322	33%	89.3%	95.7%
EC0100026	NGO101799	53%	99.7%	100%
ECO100026	-NME200578	53%	100%	100%
EC0100026	PMU101662	69%	99.8%	99.7%
EC0100026	PRT101657	80%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100026	PAE204558	57%	100%	100%
ECO100026	PPU109898	56%	100%	100%
ECO100026	PSY102684	54%	98.3%	100%
ECO100026	SPA100667	85%	82.8%	99.5%
ECO100026	STY101103	86%	100%	100%
ECO100026	STM100818	87%	100%	100%
ECO100026	SAU801193	42%	98.3%	99.0%
ECO100026	SEP200928	42%	98.3%	98.7%
ECO100026	SHA101034	41%	98.2%	99.5%
ECO100026	SMU100109	40%	98.5%	98.1%
ECO100026	SPN401501	41%	98.5%	98.1%
ECO100026	SPY201164	42%	95.8%	95.2%
ECO100026	TPA100448	26%	89.6%	81.1%
ECO100026	UUR100414	36%	97.0%	97.8%
ECO100026	VCH100669	67%	100%	100%
ECO100026	YPS000810	83%	100%	100%
ECO100020 ECO100032	BFR102496	39%	97.6%	100%
ECO100032 ECO100032	BCE114725	66%	97.1%	94.6%
ECO100032 ECO100032	BFU101987	64%	97.1%	90.0%
	BMA105964	64%	97.1%	94.6%
ECO100032	,	40%	96.9%	99.5%
ECO100032	CJU101410	41%	96.3%	99.1%
ECO100032	CAC100686		96.3%	98.8%
ECO100032	CDF102200	42%		
ECO100032	CDF101392	47%	97.1%	95.3%
ECO100032	CDP100339	45%	98.2%	94.4%
ECO100032	EBC100940	91%	51.8%	100%
ECO100032	EFA201091	45%	97.9%	98.6%
ECO100032	EFM201379	47%	96.9%	97.8%
ECO100032	ECO100032	100%	100%	100%
ECO100032	HPY101220	38%	97.1%	99.2%
ECO100032	KPN306459	80%	100%	100%
ECO100032	LPN100982	58%	97.6%	99.2%
ECO100032	LMO100114	46%	96.6%	96.1%
ECO100032	MCA101274	62%	96.6%	95.9%
ECO100032	MAV103355	43%	98.2%	99.2%
ECO100032	MBV100477	44%	57.6%	97.3%
ECO100032	MLP100326	42%	98.7%	100%
ECO100032	MTU201366	. 45%	97.6%	98.7%
ECO100032	NGO101672	67%	96.1%	96.6%
ECO100032	NME200564	67%	97.1%	97.6%
ECO100032	PMU101502	65%	97.1%	95.3%
ECO100032	PRT101652	81%	99.2%	97.9%
ECO100032	PAE204754	71%	99.0%	100%
ECO100032	PPU108522	70%	89.8%	100%
ECO100032	PSY107482	68%	64.4%	100%
ECO100032	SPA101379	86%	100%	100%
ECO100032	STY101157	93%	100%	100%
ECO100032	STM100872	94%	100%	100%
ECO100032	SAU801202	45%	97.6%	96.4%
ECO100032	SEP102450	43%	99.2%	98.1%
ECO100032	SHA102129	44%	99.2%	98.1%
ECO100032	SMU100787	43%	97.6%	97.2%
ECO100032	SPN401153	43%	98.2%	98.6%
ECO100032	SPY200619	43%	98.7%	98.9%
	<u> </u>			

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100032	VCH102355	82%	99.0%	99.7%
ECO100032	YPS000843	86%	99.7%	97.4%
ECO100032	ABA105447	76%	86.5%	51.8%
ECO100033	BAN106466	36%	92.5%	93.4%
ECO100033	BAN106013	50%	97.2%	73.8%
ECO100033	BFR11696	39%	96.3%	96.2%
ECO100033	BFR10760	40%	39.0%	91.4%
ECO100033	BPT101199	69%	97.1%	73.7%
ECO100033	BCE101906	68%	99.9%	99.9%
ECO100033	BFU114502	68%	99.9%	99.9%
ECO100033	BMA100194	68%	99.9%	99.9%
ECO100033	CJU100250	55%	100%	99.9%
ECO100033	CAC100380	46%	100%	100%
ECO100033	CDF103346	45%	68.9%	81.0%
ECO100033	CDF103290	48%	97.4%	97.7%
ECO100033	CDF102440	47%	97.4%	97.7%
ECO100033	CDP100338	52%	98.4%	98.2%
ECO100033	EBC103143	96%	4.1%	77.8%
ECO100033	EFA201093	49%	98.6%	99.4%
ECO100033	EFM200554	48%	98.6%	99.4%
ECO100033	ECO100033	100%	100%	100%
ECO100033	HPY100903	53%	99.4%	99.7%
ECO100033	KPN306727	95%	92.1%	92.8%
ECO100033	LPN103124	72%	90.9%	74.6%
ECO100033	LMO101147	50%	98.8%	98.5%
ECO100033	MCA101278	70%	99.7%	99.9%
ECO100033	MAV103356	51%	99.9%	99.4%
ECO100033	MBV100481	52%	99.9%	99.6%
ECO100033	MLP100327	51%	99.9%	98.3%
ECO100033	MTU301470	52%	99.9%	99.6%
ECO100033	NGO101630	69%	100%	99.7%
ECO100033	NME200558 ·	69%	100%	99.7%
ECO100033	PMU101505	69%	99.9%	99.9%
ECO100033	PRT101651	90%	100%	99.8%
ECO100033	PAE204752	76%	100%	99.9%
ECO100033	PPU105037	74%	100%	99.6%
ECO100033	PSY104746	75%	100%	99.9%
ECO100033	SPA101378	93%	87.4%	63.3%
ECO100033	STY101163	98%	100%	99.8%
ECO100033	STM100875	98%	100%	99.8%
ECO100033	SAU801203	49%	99.5%	100%
ECO100033	SEP201467	52%	86.8%	35.4%
ECO100033	SHA102130	49%	99.5%	100%
ECO100033	SMU100789	50%	98.4%	99.2%
ECO100033	SPN401152	49%	98.4%	99.2%
ECO100033	SPY200620	49%	98.4%	99.2%
ECO100033	VCH102354	85%	100%	99.6%
ECO100033	YPS000846	92%	100%	99.6%
ECO100040	ECO100040	100%	100%	100%
ECO100040	MAV102307	26%	22.0%	44.2%
ECO100040	PRT105337	87%	100%	100%
ECO100040	SPA102043	92%	54.8%	100%
ECO100040	STY101185	96%	100%	99.8%
ECO100068	BPT100719	25%	79.8%	77.4%

ECO100068 BCE110446 23% 97.2% 89.3% ECO100068 BFU104253 25% 59.3% 49.6% ECO100068 CJU100163 23% 81.0% 82.0% ECO100068 EBC103044 90% 96.0% 97.5% ECO100068 EC0100068 100% 100% 100% EC0100068 HRN100998 50% 99.1% 99.7% EC0100068 KPN303934 33% 100% 100% EC0100068 KPN1033934 33% 100% 97.3% EC0100068 NG0101933 30% 97.9% 97.3% EC0100068 PRU100376 49% 95.4% 94.3% EC0100068 PRT100202 66% 93.9% 94.5% EC0100068 PRT100202 66% 93.9% 94.5% EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 PSY105429 23% 88.4% 87.8% EC0100068 PY101259 91%	Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100068 BFU104253 25% 59.3% 49.6% ECO100068 CJU100163 23% 81.0% 82.0% ECO100068 EBC103044 90% 96.0% 97.5% ECO100068 EBC103044 90% 96.0% 97.5% ECO100068 EBC103044 100% 100% 100% 100% ECO100068 HN0100998 50% 99.1% 99.7% ECO100068 KPN303934 83% 100% 100% 100% ECO100068 KPN303934 83% 100% 100% ECO100068 NGA100722 24% 85.6% 85.2% ECO100068 NGA100722 24% 85.6% 85.2% ECO100068 NGA100722 24% 85.6% 85.2% ECO100068 NME200270 29% 97.9% 97.3% ECO100068 PMU100376 49% 95.4% 94.3% ECO100068 PMU100376 49% 95.4% 94.3% ECO100068 PMU100376 49% 95.4% 94.3% ECO100068 PXI100202 66% 93.9% 94.5% ECO100068 PXI10429 22% 88.4% 87.8% ECO100068 PXI10429 22% 88.4% 87.8% ECO100068 SPA101253 89% 100% 100% 100% ECO100068 SY101259 91% 100% 100% ECO100068 EXTY101259 91% 100% 100% ECO100068 TPA100143 31% 91.4% 90.7% ECO100068 TPA100143 31% 91.4% 90.7% ECO100069 BAN110716 37% 7.8% 66.2% ECO100069 BAN11057 27% 12.0% 60.6% ECO100069 BAN11032 26% 57.5% 56.3% ECO100069 ECO100069 ECO100069 TPA103304 47% 54.3% 100% 100% ECO100069 ECO10069 ECO10068 ECO10068					
EC0100068 CJU100163 23% 81.0% 82.0% EC0100068 EBC103044 90% 96.0% 97.5% EC0100068 EC0100068 100% 100% 100% EC0100068 HIN100998 50% 99.1% 99.7% EC0100068 MCA100722 24% 85.6% 85.2% EC0100068 MCA100722 24% 85.6% 85.2% EC0100068 NG0101933 30% 97.9% 97.3% EC0100068 PME200270 29% 97.9% 97.3% EC0100068 PRT100202 66% 93.9% 94.3% EC0100068 PRT100202 66% 93.9% 94.5% EC0100068 PRT100220 20% 88.4% 87.8% EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 PSY105429 23% 88.4% 87.8% EC0100068 STY101259 91% 100% 100% EC0100068 TPA100143 31%					49.6%
EC0100068 EBC103044 90% 96.0% 97.5% EC0100068 EC0100068 100% 100% 100% EC0100068 HN100998 50% 99.1% 99.7% EC0100068 KPN303934 83% 100% 100% EC0100068 MCA100722 24% 85.6% 85.2% EC0100068 NG0101933 30% 97.9% 97.3% EC0100068 NME200270 29% 97.9% 97.3% EC0100068 PMU100376 49% 95.4% 94.3% EC0100068 PRT100202 66% 93.9% 94.5% EC0100068 PAE204684 .26% 81.7% 79.7% EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 SY1001259 91% 100% 100% EC0100068 SY1001259 91% 100% 100% EC0100068 YP100143 31% 91.4% 90.7% EC0100068 YP5100140 72%					82.0%
EC0100068 EC0100068 100% 100% EC0100068 HIN100998 50% 99.1% 99.7% EC0100068 KPN303934 83% 100% 100% EC0100068 MCA100722 24% 85.6% 85.2% EC0100068 NG0101333 30% 97.9% 97.3% EC0100068 NME200270 29% 97.9% 97.3% EC0100068 PMU100376 49% 95.4% 94.3% EC0100068 PRT100202 66% 93.39% 94.5% EC0100068 PRT100202 66% 81.7% 79.7% EC0100068 PRA204684 26% 81.7% 79.7% EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 STY101259 91% 100% 100% EC0100068 TFA100143 31% 91.4% 90.7% EC0100069 TFA100143 31% 91.4% 90.7% EC0100068 YPS0000040 72% 98.8%					97.5%
EC0100068 HIN100998 50% 99.1% 99.7% EC0100068 KPN303934 83% 100% 100% EC0100068 MCA100722 24% 85.6% 85.2% EC0100068 NG0101933 30% 97.9% 97.3% EC0100068 NME200270 29% 97.9% 97.3% EC0100068 PMI100376 49% 95.4% 94.3% EC0100068 PRT100202 66% 93.9% 94.5% EC0100068 PAE104684 26% 81.7% 79.7% EC0100068 PAY10529 22% 88.4% 87.8% EC0100068 SY101259 91% 100% 100% EC0100068 SY101259 91% 100% 100% EC0100068 YPA000940 72% 98.8% 97.9% EC0100068 YPS000940 72% 98.8% 97.9% EC0100069 BAN110657 27% 12.0% 60.2% EC0100069 BAN101932 26% <					100%
EC0100068					99.7%
EC0100068 MCA100722 24% 85.6% 85.2% EC0100068 NGO101933 30% 97.9% 97.3% EC0100068 NME200270 29% 97.9% 97.3% EC0100068 PME200270 29% 95.4% 94.3% EC0100068 PMU100376 49% 95.4% 94.3% EC0100068 PRT100202 66% 93.9% 94.5% EC0100068 PAE204684 26% 81.7% 79.7% EC0100068 PAE204684 26% 81.7% 79.7% EC0100068 PAE204684 26% 81.7% 79.7% EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 SPA101253 89% 100% 100% 100% EC0100068 STY101259 91% 1000% 100% EC0100068 SPA101253 89% 100% 100% EC0100068 TPA100143 31% 91.4% 90.7% EC0100068 TPA100143 31% 91.4% 90.7% EC0100068 TPA100143 31% 91.4% 90.7% EC0100069 PAN100716 37% 7.8% 66.2% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110657 27% 12.0% 60.6% EC0100069 BAN100657 27% 12.0% 60.6% EC0100069 BAN100657 27% 10.0% 100% 100% EC0100069 BAN100657 27% 10.0% 100% 100% EC0100069 EC0100069 EC0100069 100% 100% 100% EC0100069 EC0100069 EC0100069 ICO100069 ICO					100%
ECO100068 NGO101933 30% 97.9% 97.3% ECO100068 NME200270 29% 97.9% 97.3% ECO100068 NMU100376 49% 95.4% 94.3% ECO100068 PRT100202 66% 93.9% 94.5% ECO100068 PSY105429 22% 88.4% 87.8% ECO100068 PSY105429 22% 88.4% 87.8% ECO100068 SPX105429 22% 88.4% 87.8% ECO100068 SPX105429 19% 100% 100% ECO100068 SPX101259 91% 100% 100% ECO100068 TY101259 91% 100% 100% ECO100068 TPA10143 31% 91.4% 90.7% ECO100068 YPS000940 72% 98.8% 97.9% ECO100069 BAN110716 37% 7.8% 66.2% ECO100069 BAN10932 26% 57.5% 56.3% ECO100069 BAN10034 79% <td< td=""><td></td><td></td><td></td><td></td><td>85.2%</td></td<>					85.2%
EC0100068 NME200270 29% 97.9% 97.3% EC0100068 PMU100376 49% 95.4% 94.3% EC0100068 PRT102020 66% 93.9% 94.5% EC0100068 PRT102020 26% 81.7% 79.7% EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 SPA101253 89% 100% 100% EC0100068 SPA101259 91% 100% 100% EC0100068 TPA100143 31% 91.4% 90.7% EC0100068 TPA100143 31% 91.4% 90.7% EC0100068 VCH102502 65% 97.6% 97.0% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN101932 26% 57.5% 56.3% EC0100069 EBC103045 79% 100% 100% EC0100069 EC0100069 100%				97.9%	97.3%
ECO100068 PMU100376 49% 95.4% 94.3% ECO100068 PRT100202 66% 93.9% 94.5% ECO100068 PAE204684 26% 81.7% 79.7% ECO100068 PSY105429 22% 88.4% 87.8% ECO100068 SPA101253 89% 100% 100% ECO100068 TSY101259 91% 100% 100% ECO100068 TPA100143 31% 91.4% 90.7% ECO100068 VCH102502 65% 97.6% 97.0% ECO100068 VCH102502 65% 97.6% 97.0% ECO100069 BAN110716 37% 7.8% 66.2% ECO100069 BAN110657 27% 12.0% 60.6% ECO100069 BAN101932 26% 57.5% 56.3% ECO100069 EBC103045 79% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 PRT103304 47%					97.3%
ECO100068 PRT100202 66% 93.9% 94.5% ECO100068 PAE204684 26% 81.7% 79.7% ECO100068 PSY105429 22% 88.4% 87.8% ECO100068 PSY105429 22% 88.4% 87.8% ECO100068 SPA101253 89% 100% 100% ECO100068 STY101259 91% 100% 100% ECO100068 TPA100143 31% 91.4% 90.7% ECO100068 VCH102502 65% 97.6% 97.0% ECO100068 VCH102502 65% 97.6% 97.0% ECO100068 VPS000940 72% 98.8% 97.9% ECO100069 BAN110716 37% 7.8% 66.2% ECO100069 BAN110732 26% 57.5% 56.3% ECO100069 BAN110932 26% 57.5% 56.3% ECO100069 BECO100069 100% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 ECO10069 100% 100% 100% 100% 100% ECO100069 ECO10069 100% 100% 100% 100% 100% 100% 100% 100					94.3%
EC0100068 PAE204684 26% 81.7% 79.7% EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 SPA101253 89% 100% 100% EC0100068 STY101259 91% 100% 100% EC0100068 TPA100143 31¼ 91.4% 90.7% EC0100068 VCH102502 65% 97.6% 97.0% EC0100069 VCH102502 65% 97.6% 97.0% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110657 27% 12.0% 60.6% EC0100069 BAN110657 27% 12.0% 60.6% EC0100069 BAN10032 26% 57.5% 56.3% EC0100069 BAN10032 26% 57.5% 56.3% EC0100069 BC0100069 B					
EC0100068 PSY105429 22% 88.4% 87.8% EC0100068 SPA101253 89% 100% 100% 100% EC0100068 STY101259 91% 100% 90.7% EC0100068 TPA100143 31% 91.4% 90.7% EC0100068 VCH102502 65% 97.6% 97.0% EC0100068 VPS000940 72% 98.8% 97.9% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110716 37% 7.8% 56.3% EC0100069 BAN110932 26% 57.5% 56.3% EC0100069 EC0100069 ID00 100% 100% ID00% EC0100069 EC0100069 ID00 100% ID00% ID					<u> </u>
ECO100068 SPA101253 89% 100% 100% ECO100068 STY101259 91% 100% 100% ECO100068 TPA100143 31% 91.4% 90.7% EC0100068 TPA100143 31% 91.4% 90.7% EC0100068 VCH102502 65% 97.6% 97.0% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110657 27% 12.0% 60.6% EC0100069 BAN101932 26% 57.5% 56.3% EC0100069 BAN101932 26% 57.5% 56.3% EC0100069 EBC103045 79% 100% 100% EC0100069 EDC100069 PRN303932 78% 100% 100% EC0100069 PRN103304 47% 54.3% 100% EC0100069 PRT103304 47% 54.3% 100% EC0100069 SPA101254 81% 99.5% 100% EC0100069 STM100598					
ECO100068 STY101259 91% 100% 100% ECO100068 TPA100143 31% 91.4% 90.7% ECO100068 VCH102502 65% 97.6% 97.0% ECO100068 VPS000940 72% 98.8% 97.9% EC0100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110657 27% 12.0% 60.6% EC0100069 BAN101932 26% 57.5% 56.3% EC0100069 BEC103045 79% 100% 100% EC0100069 EC0100069 100% 100% 100% EC0100069 EC0100069 100% 100% 100% EC0100069 ENN303932 78% 100% 100% EC0100069 PRT103304 47% 54.3% 100% EC0100069 SPA101254 81% 99.5% 100% EC0100069 STY101261 86% 100% 100% EC0100069 STM100598 38% 9					
ECO100068 TPA100143 31% 91.4% 90.7% ECO100068 VCH102502 65% 97.6% 97.0% ECO100068 YPS000940 72% 98.8% 97.9% ECO100069 BAN110716 37% 7.8% 66.2% EC0100069 BAN110657 27% 12.0% 60.6% EC0100069 BAN101932 26% 57.5% 56.3% EC0100069 EBC103045 79% 100% 100% EC0100069 EC0100069 100% 100% 100% EC0100069 EC0100069 100% 100% 100% EC0100069 LMO101504 24% 94.4% 91.4% EC0100069 PRT103304 47% 54.3% 100% EC0100069 SPA101254 81% 99.5% 100% EC0100069 STM100598 38% 99.5% 99.7% EC0100069 STM100598 38% 99.5% 99.1% EC0100069 YPS000941 62%					
ECO100068 VCH102502 65% 97.6% 97.0% ECO100068 YPS000940 72% 98.8% 97.9% ECO100069 BAN110716 37% 7.8% 66.2% ECO100069 BAN110657 27% 12.0% 60.6% ECO100069 BAN101932 26% 57.5% 56.3% ECO100069 EBC103045 79% 100% 100% ECO100069 EC0100069 100% 100% 100% ECO100069 EC0100069 100% 100% 100% EC0100069 ELMO101504 24% 94.4% 91.4% EC0100069 PRT103304 47% 54.3% 100% EC0100069 SPA101254 81% 99.5% 100% EC0100069 STM100598 38% 99.5% 99.7% EC0100069 STM100598 38% 99.5% 99.7% EC0100069 YCH103302 33% 99.5% 99.1% EC0100069 YPS000941 62%					
ECO100068 YPS000940 72% 98.8% 97.9% ECO100069 BAN110716 37% 7.8% 66.2% ECO100069 BAN110657 27% 12.0% 60.6% ECO100069 BAN101932 26% 57.5% 56.3% ECO100069 ECO100069 100% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 ECO100069 LMO101504 24% 94.4% 91.4% ECO100069 PRT103304 47% 54.3% 100% ECO100069 SPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BCD103942					<u></u>
ECO100069 BAN110716 37% 7.8% 66.2% ECO100069 BAN110657 27% 12.0% 60.6% ECO100069 BAN101932 26% 57.5% 56.3% ECO100069 EBC103045 79% 100% 100% ECO100069 EBC103045 79% 100% 100% ECO100069 ECC100069 100% 100% 100% ECO100069 ECO100069 LMO101504 24% 94.4% 91.4% ECO100069 PRT103304 47% 54.3% 100% ECO100069 PSPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 YPS000941 62% 99.8% 99.7% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BFU10820 48% 82.9% 85.9% ECO100081 BFU10820					
ECO100069 BAN110657 27% 12.0% 60.6% ECO100069 BAN101932 26% 57.5% 56.3% ECO100069 EBC103045 79% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 KPN303932 78% 100% 100% ECO100069 LMO101504 24% 94.4% 91.4% ECO100069 PRT103304 47% 54.3% 100% ECO100069 SPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 YCH103302 33% 99.5% 99.1% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BC103942 47%					
ECO100069 BAN101932 26% 57.5% 56.3% ECO100069 EBC103045 79% 100% 100% ECO100069 EC0100069 100% 100% 100% ECO100069 KPN303932 78% 100% 100% ECO100069 LMO101504 24% 94.4% 91.4% ECO100069 PRT103304 47% 54.3% 100% ECO100069 SPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 YCH103302 33% 99.5% 99.1% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BK0105750 47% <t< td=""><td></td><td></td><td></td><td></td><td>_ </td></t<>					_
ECO100069 EBC103045 79% 100% 100% ECO100069 ECO100069 100% 100% 100% ECO100069 KPN303932 78% 100% 100% ECO100069 KPN303932 78% 100% 100% ECO100069 LMO101504 24% 94.4% 91.4% ECO100069 PRT103304 47% 54.3% 100% ECO100069 SPA101254 81% 99.5% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 YEM103302 33% 99.5% 99.7% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BFR123082 32% 53.9% 68.6% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 CAC103463 29% <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
ECO100069 ECO100069 100% 100% 100% ECO100069 KPN303932 78% 100% 100% ECO100069 LMO101504 24% 94.4% 91.4% ECO100069 PRT103304 47% 54.3% 100% ECO100069 SPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 VCH103302 33% 99.5% 99.1% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BCT103032 44% 87.5% 90.8% ECO100081 BCT103942 47% 82.9% 85.9% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CBO101902 31% <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
ECO100069 KPN303932 78% 100% 100% ECO100069 LMO101504 24% 94.4% 91.4% ECO100069 PRT103304 47% 54.3% 100% ECO100069 SPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% EC0100069 STM100598 38% 99.5% 99.7% EC0100069 VCH103302 33% 99.5% 99.1% EC0100069 YPS000941 62% 99.8% 99.8% EC0100081 BFR12308 32% 53.9% 68.6% EC0100081 BPT103032 44% 87.5% 90.8% EC0100081 BFR12308 32% 53.9% 68.6% EC0100081 BFU103032 44% 87.5% 90.8% EC0100081 BFU10820 48% 82.2% 85.2% EC0100081 CAC103463 29% 100% 100% EC0100081 CAC103463 29% <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
EC0100069 LM0101504 24% 94.4% 91.4% EC0100069 PRT103304 47% 54.3% 100% EC0100069 SPA101254 81% 99.5% 100% EC0100069 STY101261 86% 100% 100% EC0100069 STM100598 38% 99.5% 99.7% EC0100069 VCH103302 33% 99.5% 99.1% EC0100069 YPS000941 62% 99.8% 99.8% EC0100081 BFR12308 32% 53.9% 68.6% EC0100081 BPT103032 44% 87.5% 90.8% EC0100081 BCE103942 47% 82.9% 85.9% EC0100081 BMA105750 47% 82.2% 85.2% EC0100081 BMA105750 47% 82.2% 85.2% EC0100081 CB0101902 31% 91.4% 85.9% EC0100081 CDP101285 34% 93.4% 95.8% EC0100081 EBC01941 95%		<u></u>			
ECO100069 PRT103304 47% 54.3% 100% ECO100069 SPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 VCH103302 33% 99.5% 99.1% EC0100081 BFR12308 32% 53.9% 68.6% EC0100081 BPT103032 44% 87.5% 90.8% EC0100081 BPT103032 44% 87.5% 90.8% EC0100081 BFU100820 48% 82.9% 85.9% EC0100081 BFU100820 48% 82.2% 85.2% EC0100081 CAC103463 29% 100% 100% EC0100081 CB0101902 31% 91.4% 85.9% EC0100081 CB011985 34% 93.4% 95.8% EC0100081 CDP101285 34% 93.4% 95.8% EC0100081 EFA202186 34%					
ECO100069 SPA101254 81% 99.5% 100% ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 VCH103302 33% 99.5% 99.1% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% EC0100081 BPT103032 44% 87.5% 90.8% EC0100081 BCE103942 47% 82.9% 85.9% EC0100081 BFU100820 48% 82.2% 85.2% EC0100081 BMA105750 47% 82.2% 85.2% EC0100081 CAC103463 29% 100% 100% EC0100081 CB0101902 31% 91.4% 85.9% EC0100081 CDP101285 34% 93.4% 95.8% EC0100081 EFA202186 34% 88.2% 92.3% EC0100081 EFM202534 39%					
ECO100069 STY101261 86% 100% 100% ECO100069 STM100598 38% 99.5% 99.7% ECO100069 VCH103302 33% 99.5% 99.1% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BPT103032 44% 87.5% 90.8% ECO100081 BCE103942 47% 82.9% 85.9% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CB0101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 82.2% 83.9% ECO100081 ECO100081 100%					
ECO100069 STM100598 38% 99.5% 99.7% ECO100069 VCH103302 33% 99.5% 99.1% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BPT103032 44% 87.5% 90.8% ECO100081 BCE103942 47% 82.9% 85.9% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CB0101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 ECO100081 100% 100% ECO100081 KPN301855 93% 78.9%					
ECO100069 VCH103302 33% 99.5% 99.1% ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BPT103032 44% 87.5% 90.8% ECO100081 BCE103942 47% 82.9% 85.9% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CBO101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 HN101103 59% 100% 100% ECO100081 KPN301855 93%		<u> </u>			<u> </u>
ECO100069 YPS000941 62% 99.8% 99.8% ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BPT103032 44% 87.5% 90.8% ECO100081 BCE103942 47% 82.9% 85.9% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CB0101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LMO101121 36%					
ECO100081 BFR12308 32% 53.9% 68.6% ECO100081 BPT103032 44% 87.5% 90.8% ECO100081 BCE103942 47% 82.9% 85.9% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECQ100081 CBO101902 31% 91.4% 85.9% ECQ100081 CDP101285 34% 93.4% 95.8% ECQ100081 EBC101941 95% 78.9% 100% ECQ100081 EFA202186 34% 88.2% 92.3% ECQ100081 EFM202534 39% 82.2% 83.9% ECQ100081 ECQ100081 100% 100% ECQ100081 EPN301855 93% 78.9% 100% ECQ100081 EPN102025 43% 100% 100% ECQ100081 LMO101121 36% 96.7%					
ECO100081 BPT103032 44% 87.5% 90.8% ECO100081 BCE103942 47% 82.9% 85.9% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CBO101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32%					
ECO100081 BCE103942 47% 82.9% 85.9% ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CBO101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1%					
ECO100081 BFU100820 48% 82.2% 85.2% ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECO100081 CBO101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% ECO100081 HIN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1%					
ECO100081 BMA105750 47% 82.2% 85.2% ECO100081 CAC103463 29% 100% 100% ECQ100081 CBO101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% 100% ECO100081 HIN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% <					
ECO100081 CAC103463 29% 100% 100% ECO100081 CBO101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% 100% ECO100081 HN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
ECQ100081 CBO101902 31% 91.4% 85.9% ECO100081 CDP101285 34% 93.4% 95.8% EC0100081 EBC101941 95% 78.9% 100% EC0100081 EFA202186 34% 88.2% 92.3% EC0100081 EFM202534 39% 82.2% 83.9% EC0100081 EC0100081 100% 100% 100% EC0100081 HIN101103 59% 100% 100% EC0100081 KPN301855 93% 78.9% 100% EC0100081 LPN102025 43% 100% 100% EC0100081 LMO101121 36% 96.7% 96.5% EC0100081 MAV103918 32% 94.1% 99.3% EC0100081 MBV101485 31% 94.1% 99.3% EC0100081 MLP100560 32% 94.1% 99.3% EC0100081 MTU202132 31% 94.1% 99.3%					
ECO100081 CDP101285 34% 93.4% 95.8% ECO100081 EBC101941 95% 78.9% 100% ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% ECO100081 HIN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081				
EC0100081 EBC101941 95% 78.9% 100% EC0100081 EFA202186 34% 88.2% 92.3% EC0100081 EFM202534 39% 82.2% 83.9% EC0100081 EC0100081 100% 100% EC0100081 HIN101103 59% 100% 100% EC0100081 KPN301855 93% 78.9% 100% EC0100081 LPN102025 43% 100% 100% EC0100081 LMO101121 36% 96.7% 96.5% EC0100081 MAV103918 32% 94.1% 99.3% EC0100081 MBV101485 31% 94.1% 99.3% EC0100081 MLP100560 32% 94.1% 99.3% EC0100081 MTU202132 31% 94.1% 99.3%	ECQ100081				
ECO100081 EFA202186 34% 88.2% 92.3% ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% 100% ECO100081 HIN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	CDP101285			
ECO100081 EFM202534 39% 82.2% 83.9% ECO100081 ECO100081 100% 100% 100% ECO100081 HIN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	EBC101941	95%		
ECO100081 ECO100081 100% 100% ECO100081 HIN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	EFA202186			
ECO100081 HIN101103 59% 100% 100% ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	EFM202534	39%	82.2%	
ECO100081 KPN301855 93% 78.9% 100% ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	ECO100081	100%		
ECO100081 LPN102025 43% 100% 100% ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	HIN101103	59%	100%	100%
ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	KPN301855	93%	78.9%	
ECO100081 LMO101121 36% 96.7% 96.5% ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%	ECO100081	LPN102025	43%	100%	100%
ECO100081 MAV103918 32% 94.1% 99.3% ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%		LMO101121	36%	96.7%	96.5%
ECO100081 MBV101485 31% 94.1% 99.3% ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%			32%	94.1%	99.3%
ECO100081 MLP100560 32% 94.1% 99.3% ECO100081 MTU202132 31% 94.1% 99.3%				94.1%	99.3%
ECO100081 MTU202132 31% 94.1% 99.3%					99.3%
	ECO100081	MGE100226	27%		
ECO100081 MPN100522 28% 98.7% 99.3%		·			

Query LocusID Homolog LocusID Identity Query Coverage Homolog Coverage ECO100081 NGO100621 40% 91.4% 93.4% EC0100081 NME201917 40% 91.4% 93.4% EC0100081 PMU100133 55% 100% 100% EC0100081 PRT102634 77% 100% 100% EC0100081 PPU105962 50% 100% 100% EC0100081 PPU105962 50% 100% 100% EC0100081 PSY103859 52% 100% 100% EC0100081 SPA102750 93% 100% 100% EC0100081 STY103147 93% 100% 100% EC0100081 STM102859 94% 100% 100% EC0100081 STW103147 93% 100% 100% EC0100081 SEP200891 32% 98.0% 97.9% EC0100081 SHA101307 33% 98.0% 97.9% EC0100081 TPA100379	re l
ECO100081 NME201917 40% 91.4% 93.4% ECO100081 PMU100133 55% 100% 100% EC0100081 PRT102634 77% 100% 100% EC0100081 PAE204419 51% 100% 100% EC0100081 PPU105962 50% 100% 100% EC0100081 PSY103859 52% 100% 100% EC0100081 SPA102750 93% 100% 100% EC0100081 SPA102750 93% 100% 100% EC0100081 STM102859 94% 100% 100% EC0100081 STM102859 94% 100% 100% EC0100081 SHA101307 33% 98.0% 97.9% EC0100081 SHA101307 33% 98.0% 97.9% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 URR100388 25% 96.7% 96.6% EC0100081 YPS000986 84% 100% </td <td></td>	
ECO100081 PMU100133 55% 100% 100% ECO100081 PRT102634 77% 100% 100% ECO100081 PAE204419 51% 100% 100% ECO100081 PPU105962 50% 100% 100% ECO100081 PSY103859 52% 100% 100% ECO100081 SPA102750 93% 100% 100% ECO100081 STY103147 93% 100% 100% ECO100081 STM102859 94% 100% 100% ECO100081 SAU801178 33% 98.0% 97.9% ECO100081 SALRO1178 33% 98.0% 97.9% ECO100081 SHA101307 33% 98.0% 97.9% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 TPA100379 34% 96.6% 82.7% ECO100093 ABA110624 24% 88.0	
EC0100081 PRT102634 77% 100% 100% EC0100081 PAE204419 51% 100% 100% EC0100081 PPU105962 50% 100% 100% EC0100081 PSY103859 52% 100% 100% EC0100081 SPA102750 93% 100% 100% EC010081 STY103147 93% 100% 100% EC010081 STM102859 94% 100% 100% EC0100081 SAU801178 33% 98.0% 97.9% EC0100081 SEP200891 32% 98.0% 97.9% EC0100081 SHA101307 33% 98.0% 97.9% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 TYPS000986 84% 100% 100% EC0100093 ABA100624 24% 88.0% 82.7% EC0100093 BAN105429 21% 68.1% 74.2% EC0100093 BPT102987 28% 89.1%	
ECO100081 PAE204419 51% 100% 100% ECO100081 PPU105962 50% 100% 100% ECO100081 PSY103859 52% 100% 100% EC0100081 SPA102750 93% 100% 100% EC0100081 STY103147 93% 100% 100% EC0100081 STM102859 94% 100% 100% EC0100081 SAU801178 33% 98.0% 97.9% EC0100081 SEP200891 32% 98.0% 97.9% EC0100081 SHA101307 33% 98.0% 97.9% EC0100081 SPS000986 84% 99.3% 96.6% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 TPA100388 25% 96.7% 96.6% EC0100081 TPA100378 34% 100% 100% EC0100093 BAN113055 20% 68	
ECO100081 PPU105962 50% 100% 100% ECO100081 PSY103859 52% 100% 100% ECO100081 SPA102750 93% 100% 100% ECO100081 STY103147 93% 100% 100% EC0100081 STM102859 94% 100% 100% EC0100081 SAU801178 33% 98.0% 97.9% EC0100081 SEP200891 32% 98.0% 97.9% EC0100081 SHA101307 33% 98.0% 97.9% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 TPS000986 84% 100% 100% EC0100093 ABA100624 24% 88.0% 82.7% EC0100093 BAN113055 20% 68.1% 70.9% EC0100093 BAN105429 21% 68.1% 74.2% EC0100093 BF102987 28% 8	
ECO100081 PSY103859 52% 100% 100% ECO100081 SPA102750 93% 100% 100% ECO100081 STY103147 93% 100% 100% ECO100081 STM102859 94% 100% 100% ECO100081 SAU801178 33% 98.0% 97.9% ECO100081 SEP200891 32% 98.0% 97.9% ECO100081 SHA101307 33% 98.0% 97.9% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 UR100388 25% 96.7% 96.6% ECO100081 YPS000986 84% 100% 100% ECO100093 ABA100624 24% 88.0% 82.7% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BPT102987 28% 89.1% 94.5% ECO100093 BFU10406 28% 81.9% 82% ECO100093 BEC102722 30% 75	
ECO100081 SPA102750 93% 100% 100% ECO100081 STY103147 93% 100% 100% ECO100081 STM102859 94% 100% 100% ECO100081 SAU801178 33% 98.0% 97.9% ECO100081 SEP200891 32% 98.0% 97.9% ECO100081 SHA101307 33% 98.0% 97.9% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 UR100388 25% 96.7% 96.6% ECO100081 YPS000986 84% 100% 100% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN105429 21% 68.1% 74.2% ECO100093 BC102722 30% 75% 82% ECO100093 BFU10406 28% 81.	
EC0100081 STY103147 93% 100% 100% EC0100081 STM102859 94% 100% 100% EC0100081 SAU801178 33% 98.0% 97.9% EC0100081 SEP200891 32% 98.0% 97.9% EC0100081 SHA101307 33% 98.0% 97.9% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 TVPS000986 84% 100% 100% EC0100093 ABA100624 24% 88.0% 82.7% EC0100093 BAN113055 20% 68.1% 70.9% EC0100093 BAN105429 21% 68.1% 70.9% EC0100093 BC102722 30% 75% 82% EC0100093 BFU100406 28% 81.9% 88% EC0100093 BMA104087 29% 75% 82% EC0100093 EBC010799 85% 100%	
ECO100081 STM102859 94% 100% 100% ECO100081 SAU801178 33% 98.0% 97.9% ECO100081 SEP200891 32% 98.0% 97.9% ECO100081 SHA101307 33% 98.0% 97.9% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 UUR100388 25% 96.7% 96.6% ECO100081 YPS000986 84% 100% 100% ECO100093 ABA10624 24% 88.0% 82.7% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN105429 21% 68.1% 74.2% ECO100093 BCE102722 30% 75% 82% ECO100093 BFU10406 28% 81.9% 88% ECO100093 BMA104087 29% 75% 82% ECO100093 EBC101799 85% 100% 100% ECO100093 EBC101799 85% 100% </td <td></td>	
ECO100081 SAU801178 33% 98.0% 97.9% ECO100081 SEP200891 32% 98.0% 97.9% ECO100081 SHA101307 33% 98.0% 97.9% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 UUR100388 25% 96.7% 96.6% ECO100093 YPS000986 84% 100% 100% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN105429 21% 68.1% 74.2% ECO100093 BPT102987 28% 89.1% 94.5% ECO100093 BCE102722 30% 75% 82% ECO100093 BFU100406 28% 81.9% 88% ECO100093 BFU10255 29% 75% 82% ECO100093 EBC101799 85% 100% 100% ECO100093 ECO100093 100% 10	
ECO100081 SEP200891 32% 98.0% 97.9% ECO100081 SHA101307 33% 98.0% 97.9% EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 UUR100388 25% 96.7% 96.6% EC0100081 YPS000986 84% 100% 100% EC0100093 ABA10624 24% 88.0% 82.7% EC0100093 BAN113055 20% 68.1% 70.9% EC0100093 BAN105429 21% 68.1% 74.2% EC0100093 BPT102987 28% 89.1% 94.5% EC0100093 BCE102722 30% 75% 82% EC0100093 BFU100406 28% 81.9% 88% EC0100093 BMA104087 29% 75% 82% EC0100093 EBC101799 85% 100% 100% EC0100093 EBC101099 85% 100% 100% EC0100093 EC0100093 HIN101115 <td< td=""><td>1</td></td<>	1
ECO100081 SHA101307 33% 98.0% 97.9% ECO100081 TPA100379 34% 99.3% 96.6% ECO100081 UUR100388 25% 96.7% 96.6% ECO100081 YPS000986 84% 100% 100% ECO100093 ABA100624 24% 88.0% 82.7% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN105429 21% 68.1% 74.2% ECO100093 BPT102987 28% 89.1% 94.5% ECO100093 BFU100406 28% 81.9% 82% ECO100093 BMA104087 29% 75% 82% ECO100093 BMA104087 29% 75% 82% ECO100093 EBC101799 85% 100% 100% ECO100093 EBC101799 85% 100% 100% ECO100093 ECO100093 HIN101115 39% 83.7% 86.6% ECO100093 KPN301845 <t< td=""><td></td></t<>	
EC0100081 TPA100379 34% 99.3% 96.6% EC0100081 UUR100388 25% 96.7% 96.6% EC0100081 YPS000986 84% 100% 100% EC0100093 ABA100624 24% 88.0% 82.7% EC0100093 BAN113055 20% 68.1% 70.9% EC0100093 BAN105429 21% 68.1% 74.2% EC0100093 BPT102987 28% 89.1% 94.5% EC0100093 BCE102722 30% 75% 82% EC0100093 BFU100406 28% 81.9% 88% EC0100093 EBC101799 85% 100% 100% EC0100093 EBC101799 85% 100% 100% EC0100093 EC0100093 100% 100% 100% EC0100093 EC0100093 100% 100% 86.6% EC0100093 EC0100093 100% 100% 100% EC0100093 KPN301845 88% 10	
EC0100081 UUR100388 25% 96.7% 96.6% EC0100081 YPS000986 84% 100% 100% EC0100093 ABA100624 24% 88.0% 82.7% EC0100093 BAN113055 20% 68.1% 70.9% EC0100093 BAN105429 21% 68.1% 74.2% EC0100093 BPT102987 28% 89.1% 94.5% EC0100093 BCE102722 30% 75% 82% EC0100093 BFU100406 28% 81.9% 88% EC0100093 BMA104087 29% 75% 82% EC0100093 EBC101799 85% 100% 100% EC0100093 EBC101799 85% 100% 100% EC0100093 EC0100093 100% 100% 100% EC0100093 EC0100093 100% 100% 86.6% EC0100093 EC0100093 KPN301845 88% 100% 100% EC0100093 MCA100437 2	
ECO100081 YPS000986 84% 100% 100% ECO100093 ABA100624 24% 88.0% 82.7% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN105429 21% 68.1% 74.2% EC0100093 BPT102987 28% 89.1% 94.5% EC0100093 BCE102722 30% 75% 82% EC0100093 BFU100406 28% 81.9% 88% EC0100093 BMA104087 29% 75% 82% EC0100093 CDP101255 29% 22.8% 31.2% EC0100093 EBC101799 85% 100% 100% EC0100093 ECO100093 100% 100% 100% EC0100093 KPN301845 88% 100% 86.6% EC0100093 KPN301845 88% 100% 100% EC0100093 KPN301845 88% 100% 100% EC0100093 MCA100437 24% 66.3% <td></td>	
ECO100093 ABA100624 24% 88.0% 82.7% ECO100093 BAN113055 20% 68.1% 70.9% ECO100093 BAN105429 21% 68.1% 74.2% ECO100093 BPT102987 28% 89.1% 94.5% ECO100093 BCE102722 30% 75% 82% ECO100093 BFU100406 28% 81.9% 88% ECO100093 BMA104087 29% 75% 82% ECO100093 CDP101255 29% 22.8% 31.2% ECO100093 EBC101799 85% 100% 100% ECO100093 ECO100093 100% 100% 100% ECO100093 KPN301845 88% 100% 100% ECO100093 LPN103526 29% 85.1% 95.0% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MLP100571 24% 34.	
EC0100093 BAN113055 20% 68.1% 70.9% EC0100093 BAN105429 21% 68.1% 74.2% EC0100093 BPT102987 28% 89.1% 94.5% EC0100093 BCE102722 30% 75% 82% EC0100093 BFU100406 28% 81.9% 88% EC0100093 BMA104087 29% 75% 82% EC0100093 CDP101255 29% 22.8% 31.2% EC0100093 EBC101799 85% 100% 100% EC0100093 EC0100093 100% 100% 100% EC0100093 HIN101115 39% 83.7% 86.6% EC0100093 KPN301845 88% 100% 100% EC0100093 LPN103526 29% 85.1% 95.0% EC0100093 MCA100437 24% 66.3% 74.6% EC0100093 MAV103267 23% 43.8% 55.3% EC0100093 MLP100571 24% 34.	
ECO100093 BAN105429 21% 68.1% 74.2% EC0100093 BPT102987 28% 89.1% 94.5% EC0100093 BCE102722 30% 75% 82% EC0100093 BFU100406 28% 81.9% 88% EC0100093 BMA104087 29% 75% 82% EC0100093 CDP101255 29% 22.8% 31.2% EC0100093 EBC101799 85% 100% 100% EC0100093 EC0100093 100% 100% 100% EC0100093 HIN101115 39% 83.7% 86.6% EC0100093 KPN301845 88% 100% 100% EC0100093 LPN103526 29% 85.1% 95.0% EC0100093 MCA100437 24% 66.3% 74.6% EC0100093 MAV103267 23% 43.8% 55.3% EC0100093 MLP100571 24% 34.4% 27.9% EC0100093 NG010580 34% 85.9	
ECO100093 BPT102987 28% 89.1% 94.5% ECO100093 BCE102722 30% 75% 82% ECO100093 BFU100406 28% 81.9% 88% ECO100093 BMA104087 29% 75% 82% ECO100093 CDP101255 29% 22.8% 31.2% ECO100093 EBC101799 85% 100% 100% EC0100093 ECO100093 100% 100% 100% EC0100093 HIN101115 39% 83.7% 86.6% EC0100093 KPN301845 88% 100% 100% EC0100093 LPN103526 29% 85.1% 95.0% EC0100093 MCA100437 24% 66.3% 74.6% EC0100093 MAV103267 23% 43.8% 55.3% EC0100093 MLP100571 24% 34.4% 27.9% EC0100093 NGO100580 34% 85.9% 94.6% EC0100093 PMU100145 37% 87.	
ECO100093 BCE102722 30% 75% 82% ECO100093 BFU100406 28% 81.9% 88% ECO100093 BMA104087 29% 75% 82% ECO100093 CDP101255 29% 22.8% 31.2% ECO100093 EBC101799 85% 100% 100% EC0100093 ECO100093 100% 100% 100% EC0100093 KPN301845 88% 100% 100% EC0100093 KPN301845 88% 100% 100% EC0100093 LPN103526 29% 85.1% 95.0% EC0100093 MCA100437 24% 66.3% 74.6% EC0100093 MAV103267 23% 43.8% 55.3% EC0100093 MLP100571 24% 34.4% 27.9% EC0100093 NGO100580 34% 85.9% 94.6% EC0100093 NME201903 34% 85.9% 94.6% EC0100093 PMU100145 37% 87.0%	
ECO100093 BCE102722 30% 75% 82% ECO100093 BFU100406 28% 81.9% 88% ECO100093 BMA104087 29% 75% 82% ECO100093 CDP101255 29% 22.8% 31.2% ECO100093 EBC101799 85% 100% 100% ECO100093 ECO100093 100% 100% 100% ECO100093 HIN101115 39% 83.7% 86.6% ECO100093 KPN301845 88% 100% 100% ECO100093 LPN103526 29% 85.1% 95.0% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MAV103267 23% 43.8% 55.3% ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NG0100580 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.	
EC0100093 BMA104087 29% 75% 82% EC0100093 CDP101255 29% 22.8% 31.2% EC0100093 EBC101799 85% 100% 100% EC0100093 EC0100093 100% 100% 100% EC0100093 HIN101115 39% 83.7% 86.6% EC0100093 KPN301845 88% 100% 100% EC0100093 LPN103526 29% 85.1% 95.0% EC0100093 MCA100437 24% 66.3% 74.6% EC0100093 MAV103267 23% 43.8% 55.3% EC0100093 MLP100571 24% 34.4% 27.9% EC0100093 NGO100580 34% 85.9% 94.6% EC0100093 PMU100145 37% 87.0% 93.4% EC0100093 PRT102631 61% 93.8% 97.7% EC0100093 PAE204407 31% 74.6% 70.0%	
ECO100093 CDP101255 29% 22.8% 31.2% ECO100093 EBC101799 85% 100% 100% ECO100093 ECO100093 100% 100% 100% ECO100093 HIN101115 39% 83.7% 86.6% ECO100093 KPN301845 88% 100% 100% ECO100093 LPN103526 29% 85.1% 95.0% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MAV103267 23% 43.8% 55.3% ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
EC0100093 EBC101799 85% 100% 100% EC0100093 EC0100093 100% 100% 100% EC0100093 HIN101115 39% 83.7% 86.6% EC0100093 KPN301845 88% 100% 100% EC0100093 LPN103526 29% 85.1% 95.0% EC0100093 MCA100437 24% 66.3% 74.6% EC0100093 MAV103267 23% 43.8% 55.3% EC0100093 MLP100571 24% 34.4% 27.9% EC0100093 NGO100580 34% 85.9% 94.6% EC0100093 NME201903 34% 85.9% 94.6% EC0100093 PMU100145 37% 87.0% 93.4% EC0100093 PRT102631 61% 93.8% 97.7% EC0100093 PAE204407 31% 74.6% 70.0%	
ECO100093 ECO100093 100% 100% ECO100093 HIN101115 39% 83.7% 86.6% ECO100093 KPN301845 88% 100% 100% ECO100093 LPN103526 29% 85.1% 95.0% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MAV103267 23% 43.8% 55.3% ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 HIN101115 39% 83.7% 86.6% ECO100093 KPN301845 88% 100% 100% ECO100093 LPN103526 29% 85.1% 95.0% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MAV103267 23% 43.8% 55.3% ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 KPN301845 88% 100% 100% ECO100093 LPN103526 29% 85.1% 95.0% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MAV103267 23% 43.8% 55.3% ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 LPN103526 29% 85.1% 95.0% ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MAV103267 23% 43.8% 55.3% ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 MCA100437 24% 66.3% 74.6% ECO100093 MAV103267 23% 43.8% 55.3% ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
EC0100093 MAV103267 23% 43.8% 55.3% EC0100093 MLP100571 24% 34.4% 27.9% EC0100093 NGO100580 34% 85.9% 94.6% EC0100093 NME201903 34% 85.9% 94.6% EC0100093 PMU100145 37% 87.0% 93.4% EC0100093 PRT102631 61% 93.8% 97.7% EC0100093 PAE204407 31% 74.6% 70.0%	
ECO100093 MLP100571 24% 34.4% 27.9% ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 NGO100580 34% 85.9% 94.6% ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 NME201903 34% 85.9% 94.6% ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 PMU100145 37% 87.0% 93.4% ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 PRT102631 61% 93.8% 97.7% ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 PAE204407 31% 74.6% 70.0%	
ECO100093 PPU105995 32% 90.9% 87.2%	
ECO100093 PSY103839 33% 83.7% 81.3%	
ECO100093 SPA101845 93% 100% 100%	
ECO100093 STY103179 93% 100% 100%	
ECO100093 STM102891 93% 100% 100%	
ECO100093 SEP200899 22% 62.7% 39.8%	
ECO100093 SHA100844 23% 62.0% 47.2%	
ECO100093 VCH102364 39% 88.0% 90.4%	
ECO100093 YPS001020 66% 97.5% 99.6%	
ECO100094 ABA100623 30% 96.7% 95.7%	
ECO100094 BAN111291 31% 94.3% 89.7%	
ECO100094 BAN101900 32% 93.6% 88.2%	
ECO100094 BFR102146 24% 79.8% 68.3%	
ECO100094 BPT102984 45% 97.4% 98.0%	
ECO100094 BBU100299 35% 98.6% 99.3%	
ECO100094 BCE109663 46% 98.6% 98.8%	
ECO100094 BFU100407 46% 98.6% 98.8%	

Over Legis ID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
Query LocusID ECO100094	BMA104126	47%	98.6%	98.8%
ECO100094 ECO100094	CJU100645	27%	89.8%	80.3%
ECO100094	CAC100288	26%	89.0%	86.6%
ECO100094	CBO102974	28%	89.0%	85.0%
ECO100094	EBC101798	98%	100%	100%
ECO100094	EFA202170	33%	90.5%	83.6%
ECO100094 ECO100094	EFM201888	32%	89.8%	82.8%
ECO100094	ECO100094	100%	100%	100%
ECO100094	HIN101116	52%	100%	100%
ECO100094 ECO100094	HPY100962	25%	92.9%	83.9%
ECO100094	KPN300531	96%	58.3%	100%
ECO100094	LPN103001	44%	100%	100%
ECO100094 ECO100094	LMO101001	32%	95%	89.7%
	MCA100438	25%	82.4%	78.9%
ECO100094	NGO100578	41%	97.6%	98.1%
ECO100094		42%	97.1%	97.6%
ECO100094	NME201902	50%	100%	100%
ECO100094	PMU100146		100%	100%
ECO100094	PRT102629	89%	93.6%	92.6%
ECO100094	PAE204406	51%		90.0%
ECO100094	PPU111774	52%	90%	92.2%
ECO100094	PSY103837	52%	91.7%	100%
ECO100094	SPA101844	97%	100%	
ECO100094	STY103209	99%	100%	100%
ECO100094	STM102892	99%	100%	100%
ECO100094	SAU801185	24%	88.8%	76.6%
ECO100094	SEP200915	25%	88.8%	77.6%
ECO100094	SHA100845	25%	83.6%	71.9%
ECO100094	SMU100084	31%	89.0%	79.9%
ECO100094	SPN401510	33%	83.3%	74.8%
ECO100094	SPY201171	31%	89.0%	79.7%
ECO100094	TPA100385	33%	93.3%	95.9%
ECO100094	VCH102363	68%	100%	100%
ECO100094	YPS001022	95%	100%	100%
ECO100095	ABA100622	49%	95.8%	93.9%
ECO100095	BAN103024	47%	96.9%	96.4%
ECO100095	BAN112439	48%	96.9%	96.4%
ECO100095	BFR12421	43%	84.1%	74.1%
ECO100095	BPT102981	53%	97.1%	96.4%
ECO100095	BBU100298	47%	97.1%	92.3%
ECO100095	BCE103310	58%	75.7%	100%
ECO100095	BFU100408	52%	98.2%	97.7%
ECO100095	BMA104500	52%	99.7%	99.5%
ECO100095	CJU100646	40%	100%	98.9%
ECO100095	CAC100838	50%	96.9%	95.7%
ECO100095	CBO103263	49%	96.9%	96.5%
ECO100095	CDF102447	48%	98.4%	96.2%
ECO100095	CDP101254	51%	84.6%	77.9%
ECO100095	EBC101797	97%	41.5%	97.5%
ECO100095	EFA202168	51%	90.1%	84.1%
ECO100095	EFM200220	54%	82.0%	75.8%
ECO100095	ECO100095	100%	100%	100%
ECO100095	HIN101117	63%	79.9%	77.9%
ECO100095	HPY100963	40%	79.4%	79.5%
ECO100095	KPN300530	98%	41.8%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100095	LPN100473	71%	9.4%	100%
ECO100095	LMO101235	46%	96.9%	96.2%
ECO100095	MCA101528	55%	85.9%	91.9%
ECO100095	MAV103265	47%	96.6%	97.7%
ECO100095	MBV100533	53%	79.4%	79.9%
ECO100095	MLP100572	45%	96.6%	97.9%
ECO100095	MTU202116	53%	79.4%	79.9%
ECO100095	MGE100229	34%	54.6%	55.6%
ECO100095	MPN100519	32%	54.0%	53.4%
ECO100095	NGO100577	48%	96.9%	95.2%
ECO100095	NME201901	48%	96.9%	95.2%
ECO100095	PMU100147	62%	87.5%	82.7%
ECO100095	PRT102627	94%	48.8%	100%
ECO100095	PAE204405	57%	100%	100%
ECO100095	PPU105993	58%	100%	100%
ECO100095	PSY103835	57%	100%	100%
EC0100095	SPA100031	91%	67.1%	98.1%
EC0100095	STY103211	98%	100%	100%
	STM103211 STM102893	98%	100%	100%
ECO100095		52%	81.2%	79.0%
ECO100095	SAU801186		97.4%	95.2%
ECO100095	SEP200917	45%	97.4%	95.2%
ECO100095	SHA100846	45%		78.1%
ECO100095	SMU100085	51%	89.6%	
ECO100095	SPN401509	56%	80.7%	73.5%
ECO100095	SPY201170	54%	82.0%	71.3%
ECO100095	TPA100386	49%	79.4%	72.7%
ECO100095	VCH102362	75%	100%	100%
ECO100095	YPS001023	94%	100%	100%
ECO100096	ABA100621	49%	71.5%	100%
ECO100096	BFR100706	38%	88.5%	63.3%
ECO100096	BPT102979	52%	97.7%	98.0%
ECO100096	BCE106802	54%	97.4%	97.0%
ECO100096	BFU106497	53%	97.4%	97.0%
ECO100096	BMA100406	55%	97.4%	97.0%
ECO100096	CJU100121	42%	94.1%	95.9%
ECO100096	CPN200093	36%	89.2%	95.8%
ECO100096	CTR200809	38%	90.8%	95.5%
ECO100096	EBC100070	97%	37.4%	100%
ECO100096	EFA204185	36%	16.4%	7.8%
ECO100096	ECO100096	100%	100%	100%
ECO100096	HIN101118	77%	99.7%	99.7%
ECO100096	HPY101035	42%	95.4%	96.9%
ECO100096	KPN300609	94%	76.7%	100%
ECO100096	MCA100416	54%	97.0%	97.7%
ECO100096	NGO101976	48%	96.4%	96.4%
ECO100096	NME200247	49%	96.4%	96.4%
ECO100096	PMU100148	77%	99.7%	99.7%
ECO100096	PRT100138	86%	90.8%	100%
ECO100096	PAE204404	57%	99.7%	100%
ECO100096	PPU111772	56%	99.7%	100%
ECO100096	PSY103834	56%	99.7%	100%
ECO100096	SPA100700	87%	100%	100%
ECO100096	STY103212	98%	100%	100%
ECO100096	STM102894	98%	100%	100%
				

539

W 0 02/07/103	1 + TD	T 1	T 0 0	Homolog Coverage
Query LocusID	Homolog LocusID	Identity	Query Coverage	100%
ECO100096	VCH102361	73%	100%	98.1%
ECO100096	YPS001024	92%		99.2%
ECO100102	BPT102719	31%	100%	91.2%
ECO100102	BCE111292	30%	91.5%	I
ECO100102	BFU101371	31%	98.4%	98.8%
ECO100102	BMA106052	30%	98.4%	98.8%
ECO100102	EBC103445	80%	100%	100%
ECO100102	ECO100102	100%	100%	100%
ECO100102	KPN301732	76%	97.6%	100%
ECO100102	LPN101018	24%	93.9%	92.7%
ECO100102	PRT104002	53%	98.4%	97.2%
ECO100102	PPU100250	45%	16.2%	97.6%
ECO100102	SPA101560	89%	100%	100%
ECO100102	STY103218	89%	100%	100%
ECO100102	VCH102393	40%	97.6%	97.6%
ECO100102	YPS000901	67%	100%	98.8%
ECO100113	BAN100380	31%	84.6%	98.2%
ECO100113	BMA109038	39%	90.6%	63.6%
ECO100113	CDF100440	28%	89.0%	86.6%
ECO100113	EBC103453	92%	100%	100%
ECO100113	ECO100113	100%	100%	100%
ECO100113	KPN307947	90%	24.0%	92.4%
ECO100113	KPN301741	93%	100%	98.1%
ECO100113	LMO100648	28%	89.4%	95.2%
ECO100113	MAV105850	. 25%	90.6%	92%
ECO100113	MAV106443	25%	91.7%	94.7%
ECO100113	MAV106442	28%	86.6%	85%
ECO100113	NGO100599	34%	96.9%	94.6%
ECO100113	NME201814	34%	96.9%	94.2%
ECO100113	PRT106136	79%	98.8%	96.2%
ECO100113	PAE204765	47%	97.6%	97.7%
ECO100113	PPU100113	46%	97.6%	98.8%
ECO100113	SPA100332	95%	100%	100%
ECO100113	STY103289	96%	100%	100%
ECO100113	STM102972	96%	100%	100%
ECO100113	VCH102380	65%	98.8%	98.0%
EC0100113	YPS000871	86%	99.6%	99.6%
EC0100115	ABA105536	46%	33.7%	68.0%
ECO100115	BAN101075	31%	0.2%	45.1%
ECO100115	BAN101226	36%	17.1%	43.7%
ECO100115	BPT100902	56%	0.2%	43.0%
ECO100115	BCE106716	56%	21.1%	4.3%
EC0100115	BFU100111	53%	25.9%	13.8%
ECO100115	BMA108930	53%	20.8%	55.4%
EC0100115	CJU100863	21%	4.3%	34.7%
EC0100115	CDP100400	34%	98.7%	98.2%
	EBC102752	90%	100%	100%
ECO100115			37.1%	59.6%
ECO100115	EFA202405	34%		60.1%
ECO100115	EFM201990	32%	37.1%	100%
ECO100115	ECO100115	100%	100%	58.6%
ECO100115	HIN101204	68%	34.6%	
ECO100115	KPN301446	91%	100%	100%
ECO100115	LPN100774	45%	10.3%	53.9%
ECO100115	LMO102367 .	35%	37.1%	60.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100115	MCA101150	39%	19.0%	44.2%
ECO100115	MAV103601	31%	1.6%	33.2%
EC0100115	MTU405582	32%	50.2%	84.6%
ECO100115	MTU400129	32%	64.4%	99.8%
EC0100115	MGE100278	25%	16.5%	26.3%
EC0100115 EC0100115	MPN100447	27%	3.2%	46.0%
EC0100115	NGO100078	53%	15.6%	38.0%
EC0100115	NME201414	56%	33.2%	19.6%
EC0100115	PMU100894	72%	100%	100%
EC0100115 EC0100115	PRT102280	78%	100%	100%
EC0100115 EC0100115	PAE205011	54%	83.0%	99.3%
EC0100115 EC0100115	PPU105100	54%	18.7%	59.2%
EC0100115	PSY103646	52%	20.2%	43.8%
	SPA100283	80%	60.5%	100%
ECO100115		93%	100%	100%
ECO100115	STY103294		100%	100%
ECO100115	STM102974	93%		77.6%
EC0100115	SAU101783	36%	39.8%	
ECO100115	SPY200777	30%	3.8%	35.4%
ECO100115	VCH102378	74%	100%	99.1%
EC0100115	YPS000863	79%	14.0%	37.7%
ECO100116	ABA101766	38%	95.6%	96.4%
ECO100116	BAN101609	33%	96.4%	97.0%
ECO100116	BAN103383	44%	96.4%	97.0%
EC0100116	BFR10034	33%	94.1%	98.2%
EC0100116	BFR11786	32%	94.1%	98.7%
ECO100116	BPT100905	63%	99.6%	79.2%
ECO100116	BCE110691	66%	97.9%	79.7%
EC0100116	BFU100082	65%	99.4%	92.9%
ECO100116	BMA107694	65%	99.6%	80.0%
ECO100116	CPN201018	35%	93.0%	94.1%
ECO100116	CTR200835	38%	93.0%	94.0%
ECO100116	CBO103777	35%	93.5%	95.2%
ECO100116	CBO103904	37%	94.7%	97.0%
ECO100116	CDF102926	38%	94.7%	95.7%
ECO100116	CDP100695	36%	96.6%	98.7%
ECO100116	EBC102751	97%	100%	100%
ECO100116	EFA202404	43%	96.4%	97.4%
ECO100116	EFM201020	42%	96.4%	97.4%
ECO100116	ECO100116	100%	100%	100%
ECO100116	HIN101203	81%	100%	99.2%
ECO100116	KPN301447	96%	100%	99.8%
ECO100116	LPN100879	62%	100%	100%
ECO100116	LMO101821	43%	95.4%	96.4%
ECO100116	MCA101643	37%	98.1%	98.8%
ECO100116	MAV101768	37%	95.6%	97.0%
ECO100116	MBV103409	37%	97.0%	98.7%
ECO100116	MLP101416	34%	97.0%	98.7%
ECO100116	MTU200460	37%	97.0%	98.7%
ECO100116	MGE100277	32%	93.7%	96.3%
ECO100116	MPN100448	33%	93.7%	96.3%
ECO100116	NGO100074	63%	99.4%	81.1%
ECO100116	NME201415	63%	99.4%	81.1%
ECO100116	PMU100893	88%	100%	100%
ECO100116	PRT102281	90%	100%	99.8%
	1 - 101 101	1	1 2070	<u> </u>

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100116	PAE201586	42%	98.5%	99.4%
EC0100116	PPU103115	40%	98.5%	99.4%
EC0100116	PSY104859	41%	98.5%	99.4%
ECO100116	SPA100336	96%	83.5%	100%
EC0100116	STY103295	98%	100%	99.8%
EC0100116	STM103004	98%	100%	100%
EC0100116	SAU801096	44%	95.6%	96.4%
EC0100116	SEP200806	45%	95.6%	96.4%
EC0100116	SHA100679	44%	95.6%	96.8%
EC0100116	SMU101480	36%	93.2%	74.7%
EC0100116	SPN401048	38%	93.2%	76.5%
	SPY200778	35%	97.5%	77.7%
ECO100116		89%	100%	99.8%
ECO100116	VCH102377		100%	99.8%
ECO100116	YPS000861	93%		100%
ECO100117	BPT103682	29%	59.3%	62.8%
ECO100117	BCE104746	29%	31.9%	
ECO100117	BFU101391	43%	46.8%	46.8%
ECO100117	BFU100907	41%	49.3%	57.2%
ECO100117	EBC102750	48%	89.5%	100%
ECO100117	EFA200061	22%	25.8%	20.0%
ECO100117	EFA201265	. 22%	25.8%	20.0%
ECO100117	ECO100117	100%	100%	100%
ECO100117	KPN305987	52%	91.2%	96.4%
ECO100117	MCA102218	28%	10.9%	46.5%
ECO100117	PPU101283	36%	77.3%	91.2%
ECO100117	SPA101490	56%	88.8%	100%
ECO100117	STY103296	58%	87.8%	98.0%
ECO100117	SAU800401	27%	13.1%	11.6%
ECO100117	SPN401793	29%	14.1%	22.7%
ECO100118	ABA100442	74%	99.3%	98.7%
ECO100118	BPT102269	72%	99.1%	99.5%
ECO100118	BCE109527	73%	99.3%	99.8%
ECO100118	BFU107948	74%	99.3%	98.1%
ECO100118	CJU100774	60%	98.4%	99.2%
ECO100118	EBC106332	96%	82.5%	100%
ECO100118	ECO100118	100%	100%	100%
ECO100118	HPY100766	61%	98.4%	99.2%
ECO100118	KPN300389	95%	18.2%	90.2%
ECO100118	KPN300864	96%	93.5%	100%
ECO100118	MCA101955	73%	95.5%	99.3%
ECO100118	NGO101334	74%	99.3%	99.8%
ECO100118	NME201620	74%	99.3%	99.8%
ECO100118	PMU100204	81%	99.9%	99.5%
ECO100118	PRT101310	88%	100%	100%
ECO100118	PAE201786	79%	99.0%	98.8%
ECO100118	PPU111285	79%	96.3%	96.0%
ECO100118	PSY101607	78%	99.0%	96.3%
ECO100118	SPA100508	94%	60%	100%
EC0100118	STY103298	96%	100%	100%
ECO100118	STM103008	96%	100%	100%
ECO100118	TPA100176	31%	13.3%	37.0%
ECO100118	VCH100593	82%	99.7%	99.7%
ECO100118	YPS000857	90%	100%	100%
ECO100118	ECO100135	100%	100%	100%
1300100133	1500100133	100/0	1 100/0	10070

WO 02/077183 PCT/US02/09107

Overv Legis ID Hemolog Legis ID Identity Overv Coverage Homolog Coverage

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100135	SPA106733	29%	40.3%	97.3%
ECO100135	STY103389	32%	98.5%	97.2%
ECO100136	ECO100136	100%	100%	100%
ECO100136	SPA109709	36%	58.6%	98.2%
ECO100136	STY103420	37%	86.4%	84.8%
ECO100139	ABA100394	33%	96.0%	97.9%
ECO100139	ABA100739	36%	92.5%	97.6%
ECO100139	BFU103132	30%	68.4%	77.5%
ECO100139	BFU103304	38%	76.4%	92.9%
ECO100139	BFU103222	33%	94.7%	87.3%
ECO100139	ECO100139	100%	100%	100%
ECO100139	KPN302863	35%	94.3%	96.5%
ECO100139	PRT105280	35%	93.9%	93.8%
ECO100139	PAE204081	35%	93.2%	94.2%
ECO100139	SPA104033	45%	96.4%	100%
ECO100139	STY103424	60%	98.3%	98.4%
ECO100139	SHA101318	19%	16.4%	31.5%
ECO100139	SPY100688	22%	23.1%	53.9%
ECO100139 ECO100139	TPA100432	23%	19.5%	46.1%
ECO100139	YPS000524	36%	93.1%	91.7%
ECO100139	ABA100736	35%	95.1%	96.7%
ECO100140 ECO100140	ABA100730 ABA100392	40%	88.2%	88.2%
ECO100140 ECO100140	BPT101284	41%	87.0%	75.9%
	BFU103245	39%	94.7%	97.9%
ECO100140	BFU103243	47%	93.9%	93.5%
ECO100140		100%	100%	100%
ECO100140	ECO100140	39%	91.5%	93.6%
ECO100140	KPN302865	42%	95.9%	90.7%
ECO100140	PRT105676	39%	87.0%	85.1%
ECO100140	PAE204082	34%	43.9%	81.8%
ECO100140	PPU101843	36%	87.0%	76.6%
ECQ100140	PSY105016		97.2%	95.2%
ECO100140	SPA104034	48%	100%	100%
ECO100140	STY103425	57%		92.3%
ECO100140	YPS000522	41%	96.7%	85.6%
ECO100142	ABA105477	47%	88.1%	
ECO100142	BAN112513	43%	84.3%	77.8%
ECO100142	BFR100366	39%	84.9%	88.9%
ECO100142	BPT101655	40%	88.7%	85.3%
ECO100142	BCE102263	49%	49.7%	62.9%
ECO100142	BFU102640	37%	99.4%	85.7%
ECO100142	BMA109305	39%	95.0%	87.4%
ECO100142	CJU100058	29%	79.9%	80.3%
ECO100142	CAC103001	38%	84.9%	48.7%
ECO100142	CBO100107	41%	87.4%	90.7%
ECO100142	CDF102980	37%	86.2%	50.6%
ECO100142	CDP100654	36%	93.7%	90.6%
ECO100142	EBC102063	85%	88.1%	100%
ECO100142	ECO100142	100%	100%	100%
ECO100142	HIN100063	56%	99.4%	98.1%
ECO100142	HPY101019	31%	86.2%	83.4%
ECO100142	KPN308497	77%	100%	100%
ECO100142	LPN102612	37%	88.1%	98.6%
ECO100142	LMO102140	42%	84.9%	84.3%
ECO100142	MCA100865	38%	99.4%	98.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100142	MAV104005	38%	88.7%	78.0%
ECO100142	MBV102400	33%	84.3%	73.9%
ECO100142	MLP100158	35%	80.5%	70.2%
ECO100142	MTU203554	33%	84.3%	73.9%
ECO100142	NGO101986	42%	84.3%	81.1%
ECO100142	NME200881	43%	84.3%	81.1%
ECO100142	PMU100865	57%	92.5%	88.5%
ECO100142	PRT102518	62%	97.5%	95.2%
ECO100142	PAE204724	51%	96.9%	94.4%
ECO100142	PPU108440	48%	99.4%	99.4%
ECO100142	PSY105158	53%	96.9%	93.3%
ECO100142	SPA104025	80%	98.1%	100%
ECO100142	STY103427	89%	90.6%	90.6%
ECO100142	SAU800516	40%	89.9%	89.9%
ECO100142	SEP201849	43%	87.4%	86.8%
ECO100142	SHA100112	41%	87.4%	86.8%
ECO100142	SMU100995	42%	86.2%	77.7%
ECO100142	SPN400269	36%	97.5%	55.2%
EC0100142	SPY200833	44%	87.4%	83.1%
EC0100142	VCH100582	58%	100%	95.2%
EC0100142 EC0100142	YPS000787	65%	93.1%	93.1%
ECO100142 ECO100144	ABA104779	45%	93.8%	91.9%
EC0100144 EC0100144	BPT100055	48%	88.6%	96.8%
ECO100144 ECO100144	BCE107846	45%	88.6%	95.6%
ECO100144 ECO100144	BFU114519	47%	83.1%	86.6%
EC0100144 EC0100144	BMA109098	46%	81.8%	88.9%
	EBC102068	78%	92.9%	90.2%
ECO100144 ECO100144	ECO100144	100%	100%	100%
ECO100144 ECO100144	KPN306084	76%	92.9%	97.6%
ECO100144 ECO100144	MCA102257	34%	88.3%	93.8%
ECO100144 ECO100144	NGO101470	46%	91.9%	98.6%
ECO100144 ECO100144	NME201975	45%	91.9%	98.6%
	PAE204720	48%	92.2%	96.9%
ECO100144	PPU108420	50%	93.8%	96.3%
EC0100144		44%	81.8%	96.9%
ECO100144	PSY105149			
ECO100144	SPA104029	79%	80.5% 96.4%	98.4%
EC0100144	STY103460	81%	96.4%	98.0%
ECO100144	VCH100584		91.2%	87.5%
ECO100144	YPS000781	71%	95.4%	81.5%
ECO100145	ABA104294	63%	69.5%	51.8%
ECO100145	BAN111357	29%		46.5%
ECO100145	BAN107715	31%	69.5%	92.2%
ECO100145	BPT100533	37%	94.7%	
ECQ100145	BBU100167	29%	74.2%	92%
ECO100145	BCE102976	45%	78.8%	85.5%
ECO100145	BFU114180	43%	78.8%	84.9%
ECO100145	BMA106451	46%	78.8%	85.5%
ECO100145	CJU100114	26%	76.8%	97.5%
ECO100145	CTR200677	23%	74.2%	85.8%
ECO100145	CAC101598	27%	71.5%	58.5%
ECO100145	CBO101773	30%	63.6%	54.1%
ECO100145	CDF100661	32%	32.5%	30.1%
ECO100145	EBC102067	98%	100%	100%
ECO100145	ECO100145	100%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100145	HIN100061	75%	94.0%	97.9%
ECO100145	KPN304195	98%	100%	100%
ECO100145	LPN103126	72%	88.1%	84.2%
ECO100145	MCA101582	62%	86.1%	93.5%
ECO100145	NGO101937	45%	82.1%	89.1%
ECO100145	NME200203	45%	82.1%	89.1%
ECO100145	PMU100863	80%	94.0%	97.9%
ECO100145	PRT101562	94%	100%	100%
ECO100145	PAE204719	76%	86.8%	88.5%
ECO100145 ECO100145	PPU108418	68%	85.4%	83.8%
ECO100145	PSY100089	76%	74.2%	96.6%
ECO100145	SPA104031	97%	30.5%	100%
	STY103461	98%	100%	100%
ECO100145	SAU801431	32%	31.1%	80.3%
ECO100145		50%	19.9%	34.7%
ECO100145	SPY200759	29%	56.3%	65%
ECO100145	TPA100095	85%	95.4%	97.3%
ECO100145	VCH100585			100%
ECO100145	YPS000779	94%	100%	99.0%
ECO100148	CDP101536	34%	89.7%	
ECO100148	EBC102064	78%	69.9%	100%
ECO100148	ECO100148	100%	100%	100%
ECO100148	KPN304202	81%	98.2%	100%
ECO100148	PRT101564	55%	97.8%	99.6%
ECO100148	PAE203958	47%	97.6%	99.4%
ECO100148	PPU107649	45%	96.7%	99.5%
ECO100148	PSY108786	45%	97.6%	96.6%
ECO100148	SPA101069	75%	100%	100%
ECO100148	STY103465	84%	98.7%	100%
ECO100148	STM103140	84%	100%	100%
ECO100148	VCH100590	48%	97.9%	99.5%
ECQ100148	YPS000776	65%	98.1%	98.6%
ECO100150	ABA103956	29%	98.5%	99.0%
ECO100150	BFR104161	21%	22.4%	18.2%
ECO100150	BFR100416	25%	19.0%	17.3%
ECO100150	BFR10467	21%	20.3%	20.2%
ECO100150	BFR11841	27%	16.1%	17.5%
ECO100150	BFR101776	25%	17.0%	16.1%
ECO100150	BFR103964	23%	20.5%	20.3%
ECO100150	BFR104855	31%	11.8%	13.2%
ECO100150	BFR100601	22%	44.0%	33.4%
ECO100150	BFR10065	27%	16.3%	36.7%
ECO100150	BFR103068	20%	21.4%	22.6%
ECO100150	BFR104786	21%	26.6%	24.0%
ECO100150	BFR10126	22%	86.9%	79.2%
ECO100150	BPT101854	38%	93.2%	83.9%
ECO100150	BCE111433	33%	82.6%	98.4%
ECO100150	BFU107418	24%	98.4%	96.3%
ECO100150	BMA109111	34%	95.9%	94.8%
ECO100150	EBC101242	89%	96.5%	100%
ECO100150	ECO100150	100%	100%	100%
ECO100150	HIN101435	26%	39.2%	87.2%
EC0100150	KPN304208	60%	100%	100%
	1 INT 173U4ZU8	UU /0	100/0	10070
EC0100150	MCA102097 °	23%	23.2%	19.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100150	MTU202942	29%	9.1%	37.6%
ECO100150	PRT104914	33%	99.7%	98.9%
ECO100150	PAE202464	38%	91.7%	80.7%
EC0100150	PPU105337	38%	94.4%	97.9%
EC0100150	PSY101285	37%	97.3%	97.2%
EC0100150	SPA100272	91%	47.4%	100%
ECO100150	STY104553	35%	98.1%	99.3%
ECO100150	STM103144	73%	100%	100%
ECO100150	TPA100587	29%	14.1%	47.5%
ECO100150	VCH100198	32%	91.3%	90.7%
EC0100150	YPS000978	26%	96.5%	98.1%
EC0100151	BFR105362	32%	78.5%	82.5%
EC0100151	BFU102313	62%	98.1%	88.1%
EC0100151	CJU101278	38%	89.8%	94.0%
ECO100151	EFA201996	42%	87.5%	91.6%
ECO100151 ECO100151	ECO100151	100%	100%	100%
ECO100151 ECO100151	HPY100874	31%	90.9%	94.9%
ECO100151 ECO100151	KPN304210	92%	100%	100%
EC0100151 EC0100151	PRT102499	36%	89.8%	94.0%
	<u> </u>	42%	86.0%	87.6%
ECO100151	PPU100161	75%	67.5%	100%
ECO100151	SPA100271		100%	100%
EC0100151	STY103469	91%		100%
ECO100151	STM103175	92%	100%	
ECO100151	SMU100116	38%	90.2%	88.4%
ECO100151	VCH100199	45%	92.1%	85.6%
ECO100151	YPS000155	79%	100%	100%
ECO100153	BAN110904	27%	94.4%	45.6%
ECO100153	BAN110932	31%	94.4%	94.7%
ECO100153	BCE113442	30%	4.2%	94.8%
ECO100153	BFU103716	31%	100%	95.5%
ECO100153	BMA103709	31%	99.5%	94.9%
EC0100153	CDP100079	29%	40.2%	95.7%
ECO100153	EBC105792	81%	1.4%	98.6%
ECO100153	ECO100153	100%	100%	100%
ECO100153	KPN304213	83%	100%	100%
ECQ100153	SPA103168	82%	21.2%	98.9%
EC0100153	STY103491	90%	98.8%	95.2%
ECO100153	STM103177	90%	98.8%	95.2%
ECO100153	VCH100201	36%	97.4%	97.5%
ECO100153	YPS000152	68%	98.8%	98.2%
ECO100158	ABA104905	27%	65.0%	51.6%
ECO100158	BAN107089	25%	77.4%	65.7%
ECO100158	BFR101755	22%	61.7%	44.9%
ECO100158	BPT100813	34%	91.0%	84.2%
ECO100158	BCE101181	40%	62.8%	77.5%
ECO100158	BFU105758	34%	90.2%	83.2%
ECO100158	BMA108052	36%	94.7%	83.5%
ECO100158	CJU101523	28%	73.3%	73.1%
ECO100158	CAC103091	21%	60.2%	45.6%
ECO100158	CBO101985	29%	72.9%	64.1%
ECO100158	CDP100163	27%	64.3%	53.1%
ECO100158	EBC102140	77%	99.2%	99.2%
ECO100158	ECO100158	100%	100%	100%
ECO100158	HIN101441	22%	66.2%	56.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100158	HPY101538	24%	74.4%	55.8%
ECO100158	KPN308672	72%	99.6%	99.6%
ECO100158	LMO101056	29%	89.1%	81.3%
ECO100158	PRT105976	50%	95.9%	95.7%
ECO100158	PAE204042	30%	93.6%	95.1%
ECO100158	PPU104488	29%	94.4%	94.4%
ECO100158	PSY103310	25%	51.9%	44.0%
ECO100158	SPA102649	75%	76.3%	99.5%
ECO100158	STY103497	80%	100%	100%
ECO100158	SAU800609	27%	89.5%	85.4%
ECO100158	SEP200175	28%	85.3%	81.7%
ECO100158	SHA101549	26%	89.5%	83.2%
ECO100158	SPY201383	20%	74.1%	68.4%
ECO100158	VCH102346	37%	90.2%	89.1%
ECO100158	YPS000147	54%	97.0%	92.9%
ECO100161	BAN110062	37%	59.3%	71.5%
ECO100161	BAN107077	36%	78.9%	67.6%
ECO100161	BFR11675	39%	75.7%	74.7%
EC0100161	BPT102297	41%	74.3%	85.3%
EC0100161	BBU100104	34%	93.9%	92.1%
EC0100161	BCE109327	36%	95.6%	92.1%
EC0100161	BMA103894	36%	94.7%	91.5%
EC0100161	CJU101153	. 38%	95.1%	94.7%
EC0100161	CTR200205	40%	77.6%	75.5%
EC0100161	CBO100298	43%	57.6%	67.1%
EC0100161	EBC102486	91%	100%	100%
ECO100161	EFA202055	34%	92.2%	78.0%
ECO100161	EFM201658	36%	48.3%	95.8%
EC0100161	ECO100161	100%	100%	100%
EC0100161	HPY101002	42%	79.1%	88.9%
EC0100161	KPN304180	90%	100%	100%
EC0100161	LPN103539	41%	93.5%	95.2%
EC0100161	LMO101189	36%	60.3%	60.8%
EC0100161	MAV103189	34%	56.1%	53.4%
EC0100161	MBV100882	36%	56.1%	51.3%
EC0100161	MLP100663	35%	57.2%	51.4%
EC0100161	MTU201206	35%	56.1%	49.0%
EC0100161	PAE200765	38%	77.8%	99.6%
EC0100161	PSY102326	38%	73.4%	96.8%
EC0100161	SPA102656	90%	100%	96.5%
EC0100161	STY103840	92%	100%	100%
ECO100161	STM103213	92%	100%	100%
EC0100161	SAU801728	40%	57.6%	65.8%
ECO100161	SEP202073	41%	61.8%	73.1%
ECO100161	SHA100568	40%	59.1%	67.3%
EC0100161	SMU101421	38%	57.6%	72.6%
ECO100161	SPY201695	33%	69.8%	87.2%
ECO100161	TPA100832	34%	89.2%	88.7%
ECO100161	VCH100556	58%	100%	99.8%
ECO100161	YPS000135	75%	100%	100%
ECO100167	ABA104028	40%	94.6%	95.9%
ECO100167	BPT101104	38%	88.9%	91.7%
EC0100167	BCE102413	35%	83.9%	99.6%
ECO100167	BFU101941	36%	68.2%	99.7%
200100107	122 0 10 12 71	1 30/0	1 00.270	1

WO 02/077183

PCT/US02/09107

Postitive Overage Homolog Coverage

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100167	BMA110028	36%	92.7%	95.5%
ECO100167	CDP101162	26%	47.1%	60.8%
ECO100167	EBC103102	90%	64.9%	99.5%
ECO100167	ECO100167	100%	100%	100%
ECO100167	HIN101684	46%	92.8%	95.6%
ECO100167	KPN306317	88%	97.2%	99.8%
ECO100167	LPN101443	37%	94.9%	98.1%
ECO100167	MCA101007	33%	95.1%	96.2%
ECO100167	MAV103401	24%	48.3%	90.3%
ECO100167	MBV102319	25%	93.8%	97.3%
ECO100167	MTU202880	25%	93.8%	97.3%
ECO100167	NGO100301	33%	92.1%	95.7%
ECO100167	NME201261	33%	92.2%	95.8%
ECO100167	PMU100460	46%	96.7%	99.3%
ECO100167	PRT104542	66%	77.3%	97.3%
ECO100167	PAE203656	42%	96.2%	96.1%
ECO100167	PPU105172	41%	93.7%	94.1%
ECO100167	PSY104380	42%	94.7%	94.8%
ECO100167	SPA100030	76%	41.9%	97.4%
ECO100167	STY103845	92%	100%	100%
ECO100167	VCH102228	53%	96.9%	98.0%
ECO100167	YPS001121	76%	98.8%	96.5%
ECO100169	ABA104000	72%	92.1%	88.8%
ECO100169	BAN100446	53%	76.8%	95.7%
ECO100169	BAN110084	53%	97.9%	98.7%
ECO100169	BFR104950	47%	97.1%	84.2%
ECO100169	BPT101108	59%	97.9%	97.2%
EC0100169	BBU100122	47%	92.5%	85.8%
ECO100169	BCE101166	55%	97.9%	98.0%
ECO100169	BFU101939	59%	92.5%	89.2%
ECO100169	BMA101604	56%	97.1%	98.8%
ECO100169	CJU101107	52%	98.8%	89.7%
EC0100169	CPN200048	43%	92.1%	79.8%
EC0100169	CTR200051	45%	88.8%	75.8%
ECO100169	CAC101756	52%	93.4%	97.0%
ECO100169	CBO103187	53%	93.4%	97.0%
ECO100169	CDF101764	54%	97.5%	99.2%
ECO100169	CDP101120	50%	93.4%	85.0%
EC0100169	EBC103098	97%	100%	100%
ECO100169	EFA200418	51%	99.2%	91.2%
EC0100169	ECO100169	100%	100%	100%
ECO100169	HIN100892	82%	100%	95.6%
EC0100169	HPY101531	47%	98.8%	90.9%
EC0100169	KPN301398	98%	95.0%	100%
ECO100169	LPN100646	57%	99.2%	94.9%
ECO100169	LMO100442	53%	99.2%	96.0%
ECO100169	MCA101251	67%	92.1%	81.9%
ECO100169	MAV106404	52%	92.9%	81.2%
ECO100169	MBV102282	52%	92.9%	78.0%
EC0100169	MLP100973	52%	92.9%	80.9%
ECO100169	MTU202852	52%	92.9%	78.0%
ECO100169	MGE100072	36%	92.1%	78.5%
ECO100169	MPN100623	39%	92.5%	76.2%
ECO100169	NGO100893	53%	99.2%	100%
1500100105	11100100000	1 33/0	1 2 2 3 2 2 2	1

ECO100169 NME200306 52% 99.2% 100% ECO100169 PMU101984 84% 100% 95.2% ECO100169 PRT105507 90% 100% 100% EC0100169 PPU107884 70% 93.8% 92.2% EC0100169 PPU107884 70% 93.8% 84.6% EC0100169 SPX1018183 72% 93.8% 84.6% EC0100169 SPX10195 97% 100% 100% EC0100169 SRM103561 97% 100% 100% EC0100169 SRM103561 97% 100% 100% EC0100169 SRM10313 50% 93.4% 85.9% EC0100169 SEP201549 52% 93.4% 85.9% EC0100169 SRM100713 50% 70.1% 81.2% EC0100169 SPN402017 48% 100% 93.1% EC0100169 SPN402017 48% 100% 94.5% EC0100169 SPN402017 48% 1	VO 02/07/103	TT T TD	T.1	O Consenses	
ECO100169 PMUI01984 84% 100% 95.2% EC0100169 PRT105507 90% 100% 100% EC0100169 PAB203654 73% 99.6% 97.2% EC0100169 PSV108183 70% 93.8% 92.2% EC0100169 PSV103848 70% 93.8% 84.6% EC0100169 SPA101195 97% 100% 100% EC0100169 STM103848 97% 100% 100% EC0100169 STM103561 97% 100% 100% EC0100169 SAUR01256 51% 93.4% 88.2% EC0100169 SEP201549 52% 93.4% 85.29% EC0100169 SEM100713 50% 70.1% 81.2% EC0100169 SMV20174 48% 99.6% 92.0% EC0100169 SPY201599 50% 100% 94.5% EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 VCHI02226 82% <t< td=""><td>Query LocusID</td><td>Homolog LocusID</td><td>Identity</td><td>Query Coverage</td><td>Homolog Coverage</td></t<>	Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100169 PAT105507 90% 100% 100% ECO100169 PAE203654 73% 99.6% 97.2% ECO100169 PPU107884 70% 93.8% 92.2% ECO100169 PSV108183 72% 93.8% 84.6% ECO100169 SPA10195 97% 100% 100% ECO100169 STY103848 97% 100% 100% ECO100169 STY103848 97% 100% 100% ECO100169 STM103561 97% 100% 100% ECO100169 SAU801256 51% 93.4% 88.2% ECO100169 SEP201549 52% 93.4% 85.9% ECO100169 SPN402017 48% 100% 93.1% ECO100169 SPN402017 48% 100% 94.5% ECO100169 SPN402017 48% 100% 94.5% ECO100169 SPN402017 48% 100% 94.5% ECO100169 TPA100599 48% 94.2% 78.0% ECO100169 UUR100024 36% 91.3% 63.3% ECO100169 UUR10024 36% 91.3% 63.3% ECO100169 VCH102226 82% 100% 100% ECO100169 VCH102226 82% 100% 100% ECO100170 BAN103067 47% 98.9% 97.9% ECO100170 BAN103067 47% 98.9% 97.9% ECO100170 BAN103067 47% 98.9% 97.9% ECO100170 BFN10110 37% 94.3% 97.2% ECO100170 BFU10024 48% 98.2% 97.9% ECO100170 BFU10024 48% 98.2% 97.9% ECO100170 BEU10021 33% 87.6% 92.3% ECO100170 BEU10021 33% 87.6% 92.3% ECO100170 BEU100280 49% 98.2% 96.9% ECO100170 BEU100280 49% 98.2% 96.9% ECO100170					
ECO100169 PAE203654 73% 99.6% 97.2% ECO100169 PSV108183 72% 93.8% 92.2% ECO100169 PSV108183 72% 93.8% 84.6% ECO100169 SPA101195 97% 100% 100% ECO100169 STN103848 97% 100% 100% ECO100169 SAUR01256 51% 93.4% 88.2% ECO100169 SAUR01256 51% 93.4% 85.5% ECO100169 SEP21549 52% 93.4% 85.5% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SMU100628 49% 99.6% 92.0% ECO100169 SPN402017 48% 100% 93.1% ECO100169 SPY201599 50% 100% 94.5% ECO100169 SPYA02017 48% 99.6% 92.0% ECO100169 TPA100599 48% 99.6% 92.0% ECO100169 TPA100599 48%					
ECO100169 PPU107884 70% 93.8% 92.2% ECO100169 SPX108183 72% 93.8% 84.6% ECO100169 SPX103848 97% 100% 100% ECO100169 STM103561 97% 100% 100% ECO100169 SAU801256 51% 93.4% 88.2% ECO100169 SEP201549 52% 93.4% 85.9% ECO100169 SEP201549 52% 93.4% 85.9% ECO100169 SMU100628 49% 99.6% 92.0% ECO100169 SPM402017 48% 100% 93.1% ECO100169 SPX402017 48% 100% 94.5% ECO100169 SPX402017 48% 100% 94.5% ECO100169 SPX402017 48% 100% 94.5% ECO100169 VCRH02226 82% 100% 100% ECO100170 PS010127 93% 100% 100% ECO100170 BAN10110 37% 94					
ECO100169 PSY108183 72% 93.8% 84.6% ECO100169 SPA101195 97% 100% 100% ECO100169 STY103848 97% 100% 100% ECO100169 STM103561 97% 100% 100% ECO100169 SEP301549 52% 93.4% 88.2% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SMU10628 49% 99.6% 92.0% ECO100169 SPN402017 48% 100% 93.1% ECO100169 SPY201599 50% 100% 94.5% ECO100169 PSP201599 50% 100% 94.5% ECO100169 PSP201599 50% 100% 94.3% ECO100169 PSP201599 50% 100% 96.3% ECO100169 PSP201599 36% 91.3% 63.3% ECO100169 PSP001127 33%					
ECO100169 SPA101195 97% 100% 100% ECO100169 STY103848 97% 100% 100% 100% ECO100169 STY103861 97% 100% 100% ECO100169 SAU801256 51% 93.4% 88.2% ECO100169 SAU801256 51% 93.4% 88.2% ECO100169 SEP201549 52% 93.4% 85.9% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SMU100628 49% 99.6% 92.0% ECO100169 SNU100628 49% 99.6% 92.0% ECO100169 SPY201599 50% 100% 93.1% ECO100169 SPY201599 50% 100% 94.5% ECO100169 UUR100024 36% 91.3% 63.3% ECO100169 UUR100024 36% 91.3% 63.3% ECO100169 VCH102226 82% 100% 100% 100% ECO100169 VCH102226 82% 100% 100% 100% ECO100170 ABA106144 54% 98.2% 97.9% ECO100170 BAN100110 37% 94.3% 97.2% ECO100170 BAN10010 37% 94.3% 97.2% ECO100170 BAN103067 47% 98.9% 99.0% ECO100170 BR103067 47% 98.9% 99.0% ECO100170 BR10100 38 99.0% 97.9% ECO100170 BR10100 38 99.0% 97.9% ECO100170 BR10100 38 99.0% 97.9% ECO100170 BR10100 39% 98.2% 97.9% ECO100170 BR10100 39% 98.2% 99.9% ECO100170 BR10100 39% 98.2% 99.9% ECO100170 BR10100 49% 98.2% 97.9% ECO100170 BR10100 49% 98.2% 97.9% ECO100170 BR10100 49% 98.2% 97.9% ECO100170 BR10100 39% 98.2% 96.9% ECO100170 BCO100170 BCO0000 35% 86.9% 91.8% 99.9% ECO100170 BCO100170 BC					
ECO100169 STY103848 97% 100% 100% ECO100169 STM103561 97% 100% 100% ECO100169 SBV801256 51% 93.4% 88.2% ECO100169 SEP201549 52% 93.4% 85.9% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SPN402017 48% 100% 93.1% ECO100169 SPY201599 50% 100% 94.5% ECO100169 TPA100599 48% 94.2% 78.0% ECO100169 UR100226 82% 100% 100% ECO100169 VCH102226 82% 100% 100% ECO100170 BAN106144 54% 98.2% 97.9% ECO100170 BAN10310 37% 94.3% 97.2% ECO100170 BRN10363 32% 9				ļ	
ECO100169 STM103561 97% 100% 100% ECO100169 SAU801256 51% 93.4% 88.2% ECO100169 SEP201549 52% 93.4% 88.5% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SMU100628 49% 99.6% 92.0% EC0100169 SPM201599 50% 100% 93.1% EC0100169 SPY201599 50% 100% 94.5% EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 UVR100024 36% 91.3% 63.3% EC0100169 VCH102226 82% 100% 100% EC0100170 ABA166144 54% 98.2% 97.9% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BRN10333 32% 90.5% 97.9% EC0100170 BRT10109 49%					·
ECO100169 SAU801256 51% 93.4% 88.2% ECO100169 SBR100713 52% 93.4% 85.9% EC0100169 SHA100713 50% 70.1% 81.2% EC0100169 SMU100628 49% 99.6% 92.0% EC0100169 SPN402017 48% 100% 93.1% EC0100169 SPN201599 50% 100% 93.1% EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 UR100024 36% 91.3% 63.3% EC0100169 VCH102226 82% 100% 100% EC0100170 BAR106144 54% 98.2% 97.9% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BFR10353 32%					
ECQ100169 SEP201549 52% 93.4% 85.9% ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SMU10628 49% 99.6% 92.0% ECO100169 SPV402017 48% 100% 93.1% ECO100169 SPY201599 50% 100% 94.5% ECO100169 TPA100599 48% 94.2% 78.0% ECO100169 UUR100224 36% 91.3% 63.3% ECO100169 VCH102226 82% 100% 100% ECO100169 VCH102226 82% 100% 100% ECO100169 YP8001127 93% 100% 97.2% ECO100170 BAN110110 37% 94.3% 97.2% ECO100170 BAN110110 37% 94.3% 97.2% ECO100170 BAN10353 32% 90.5% 97.9% ECO100170 BFT101109 49% 98.2% 97.9% ECO100170 BBU00121 33% 87.6% 92.8% ECO100170 BCI01070 BPS 98.2% 97.9% ECO100170 BCI01004 48% 98.2% 97.9% ECO100170 BCI01004 48% 98.2% 97.9% ECO100170 BCI01004 49% 98.2% 97.9% ECO100170 BCI01004 48% 98.2% 96.9% ECO100170 BCI01004 48% 98.2% 96.9% ECO100170 BCI01004 48% 98.2% 96.9% ECO100170 BCI01004 49% 98.2% 96.9% ECO100170 BCI01004 49% 98.2% 96.9% ECO100170 BCI01004 49% 98.2% 96.9% ECO100170 BCI0101106 35% 98.2% 96.9% ECO100170 CDI010106 35% 98.2% 99.6% ECO100170 CPN200047 33% 92.6% 99.6% ECO100170 CPN200047 33% 92.9% 99.6% ECO100170 CPN20047 33% 92.9% 99.6% ECO100170 CPN20044 44% 98.9% 98.9% 99.9% ECO100170 CPN20044 44% 98.9% 98.9% 99.9% ECO100170 CPN20044 44% 98.9% 98.9% 99.6% ECO100170 CPN20044 49% 98.9% 99.9% ECO100170 CPN20044 49% 98.9% 98.6% 99.9% ECO100170 CPN20044 49% 98.9% 98.6% 99.9% ECO100170 CPN20044 49% 98.9% 98.6% ECO100170 CPN20044 49% 98.9% 98.9% 99.6% ECO100170 DPN00014 42% 98.9% 99.6% ECO100170 MON00000000000000000000000000000000000					
ECO100169 SHA100713 50% 70.1% 81.2% ECO100169 SMU100628 49% 99.6% 92.0% EC0100169 SPN402017 48% 100% 93.1% EC0100169 SPY201599 50% 100% 94.5% EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 UVR100224 36% 91.3% 63.3% EC0100169 VCH102226 82% 100% 100% EC0100170 BAN161117 93% 100% 100% EC0100170 BAN1610110 37% 94.3% 97.9% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BRN10333 32% 90.5% 97.9% EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BFR101109 49% 98.2% 90.9% EC0100170 BCB107064 48% 98.2% 96.9% EC0100170 BCD10044 48%					
EC0100169 SMU100628 49% 99.6% 92.0% EC0100169 SPN402017 48% 100% 93.1% EC0100169 SPN201599 50% 100% 94.5% EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 UUR100024 36% 91.3% 63.3% EC0100169 UUR100024 36% 91.3% 63.3% EC0100169 VCM100226 82% 100% 100% 100% EC0100169 VCM100226 82% 100% 100% 100% EC0100170 ABA106144 54% 98.2% 97.9% EC0100170 BAN110110 37% 94.3% 97.2% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BAN10110 37% 94.3% 97.2% EC0100170 BRIOSS3 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BPT101109 49% 98.2% 96.9% EC0100170 BRU00121 33% 87.6% 92.8% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 96.9% EC0100170 CTR2000647 33% 92.6% 99.6% EC0100170 CDF10162 35% 86.9% 99.6% EC0100170 CDF10162 44% 98.9% 99.3% EC0100170 CDF10162 44% 98.9% 99.9% EC0100170 EDG101301 42% 98.2% 96.9% EC0100170 CDF101762 43% 99.3% EC0100170 CDF101762 43% 99.3% EC0100170 CDF101762 43% 99.3% ECO100170 EDG10301 42% 98.6% 99.0% ECO100170 EDG10301 42% 98.6% 99.0% ECO100170 CDF101762 43% 99.3% 100% ECO100170 EDG10301 42% 98.6% 99.0% ECO100170 CDF101762 43% 99.3% 100% ECO100170 EDG10301 42% 98.6% 99.0% ECO100170 EDG10301 42% 99.9% 99.6% ECO100170 MCN1020285 39% 99.9% 99.6% ECO100170 MCN1020285 39% 99.9% 99.6% ECO100170 MCN1020305 50% 99.3% 99.6% ECO100170 MCN1020305 50% 99.					
ECO100169 SPN402017 48% 100% 93.1% ECO100169 SPY201599 50% 100% 94.5% EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 UUR100024 36% 91.3% 63.3% EC0100169 VCH102226 82% 100% 100% EC0100170 ABA106144 54% 98.2% 97.9% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BER10353 32% 90.5% 97.9% EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BFR101109 49% 98.2% 97.9% EC0100170 BER100121 33% 87.6% 92.8% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BFR0100280 49% 98.2% 96.9% EC0100170 BFU100280 49%					
EC0100169 SPY201599 50% 100% 94.5% EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 UUR100024 36% 91.3% 63.3% EC0100169 VCH102226 82% 100% 100% EC0100170 BAA106144 54% 98.2% 97.9% EC0100170 BAN101010 37% 94.3% 97.2% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BRN103153 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BBU1002280 48% 98.2% 96.9% EC0100170 BRM107429 49% 98.2% 96.9% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CR200050 35%					
EC0100169 TPA100599 48% 94.2% 78.0% EC0100169 UUR100024 36% 91.3% 63.3% EC0100169 VCH102226 82% 100% 100% EC0100170 ABA106144 54% 98.2% 97.9% EC0100170 BAN10110 37% 94.3% 97.2% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BR10353 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU00121 33% 87.6% 92.8% EC0100170 BEU100220 49% 98.2% 96.9% EC0100170 CBN101106 35% 98.2% 96.9% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CR200041 33%			\	ļ	
EC0100169 UUR100024 36% 91.3% 63.3% EC0100169 VCH102226 82% 100% 100% EC0100170 ABA106144 54% 98.2% 97.9% EC0100170 BAN10110 37% 94.3% 97.2% EC0100170 BAN110110 37% 94.3% 97.2% EC0100170 BRN103067 47% 98.9% 99.0% EC0100170 BRP10353 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BRA107429 49% 98.2% 96.9% EC0100170 CPN200047 33% 92.6% 99.9% EC0100170 CPN200047 33% 92.6% 99.9% EC0100170 CRN200050 35% 98.6% 99.8% EC0100170 CRN200050 35%					
EC0100169 VCH102226 82% 100% 100% EC0100169 YPS001127 93% 100% 100% EC0100170 ABA106144 54% 98.2% 97.9% EC0100170 BAN110110 37% 94.3% 97.2% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BR10353 32% 90.5% 97.9% EC0100170 BBF101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BCE010064 48% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CIVI101106 35% 98.2% 99.9% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 91.8% EC0100170 CBC1013201 42%					
EC0100169 YPS001127 93% 100% 100% EC0100170 ABA166144 54% 98.2% 97.9% EC0100170 BAN10110 37% 94.3% 97.2% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BCE010064 48% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 96.9% EC0100170 CPR200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 91.8% EC0100170 CR200050 35% 86.9% 91.8% EC0100170 CB0101301 42%					
ECO100170 ABA106144 54% 98.2% 97.9% ECO100170 BAN110110 37% 94.3% 97.2% EC0100170 BAN103067 47% 98.9% 99.0% EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BEC107064 48% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CRC101812 44% 98.9% 99.3% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101115 43%				<u> </u>	\
ECO100170 BAN110110 37% 94.3% 97.2% ECO100170 BAN103067 47% 98.9% 99.0% EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BCE107064 48% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CRC101812 44% 98.9% 99.3% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 EFA200421 41%				<u> </u>	
ECO100170 BAN103067 47% 98.9% 99.0% ECO100170 BFR10353 32% 90.5% 97.9% ECO100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BCE107064 48% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 96.9% EC0100170 CPN200047 33% 92.6% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 91.8% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 EBC103096 95%				1	<u> </u>
EC0100170 BFR10353 32% 90.5% 97.9% EC0100170 BPT101109 49% 98.2% 97.9% EC0100170 BBU100121 33% 87.6% 92.8% EC0100170 BCE107064 48% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 99.9% EC0100170 CPR200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 99.3% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101152 43% 99.3% 100% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 EEC0100170 100%					
ECO100170 BPT101109 49% 98.2% 97.9% ECO100170 BBU100121 33% 87.6% 92.8% ECO100170 BCE107064 48% 98.2% 96.9% ECO100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 91.8% EC0100170 CTR200050 35% 86.9% 91.8% EC0100170 CB0101301 42% 98.6% 99.3% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 ECO100170 100% 100% 100% EC0100170 HIN100893 71%					
ECO100170 BBU100121 33% 87.6% 92.8% ECO100170 BCE107064 48% 98.2% 96.9% ECO100170 BFU100280 49% 98.2% 96.9% ECO100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 92.6% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CPN200050 35% 86.9% 91.8% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CBO101301 42% 98.6% 99.3% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101762 43% 99.3% 100% EC0100170 EBC103096 95% 100% 100% EC0100170 EBC103096 95% 100% 100% EC0100170 ECO100170 100% 100% 100% EC0100170 HN100893 71%				<u> </u>	
EC0100170 BCE107064 48% 98.2% 96.9% EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 99.3% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101762 43% 99.3% 100% EC0100170 EBC103096 95% 100% 100% EC0100170 EBC103096 95% 100% 100% EC0100170 EC0100170 100% 100% 100% EC0100170 HN100893 71% 98.9% 98.6% EC0100170 KPN301399 96%					
EC0100170 BFU100280 49% 98.2% 96.9% EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CR200050 35% 86.9% 91.8% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDP101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 EFA200421 41% 99.3% 99.7% EC0100170 EC0100170 100% 100% 100% EC0100170 HN100893 71% 98.9% 98.6% EC0100170 HPY101532 36% 99.3% 100% EC0100170 KPN301399 96%					
EC0100170 BMA107429 49% 98.2% 96.9% EC0100170 CJU101106 35% 98.2% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 91.8% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 EFA200421 41% 99.3% 99.7% EC0100170 EC0100170 100% 100% 100% EC0100170 HPY101532 36% 99.3% 100% EC0100170 KPN301399 96% 100% 100% EC0100170 KPN301399 96%					
EC0100170 CJU101106 35% 98.2% 99.4% EC0100170 CPN200047 33% 92.6% 99.6% EC0100170 CTR200050 35% 86.9% 91.8% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 EFA200421 41% 99.3% 99.7% EC0100170 EC0100170 100% 100% 100% EC0100170 HPY101532 36% 99.3% 100% EC0100170 HPY101532 36% 99.3% 100% EC0100170 KPN301399 96% 100% 100% EC0100170 LMO102014 45%					
ECO100170 CPN200047 33% 92.6% 99.6% ECQ100170 CTR200050 35% 86.9% 91.8% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDF101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 EFA200421 41% 99.3% 99.7% EC0100170 EC0100170 100% 100% 100% EC0100170 HIN100893 71% 98.9% 98.6% EC0100170 HPY101532 36% 99.3% 100% EC0100170 KPN301399 96% 100% 100% EC0100170 LPN100716 52% 98.2% 98.6% EC0100170 MCA101252 52% 98.2% 97.6% EC0100170 MAV106405 40%					
ECQ100170 CTR200050 35% 86.9% 91.8% EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDP101115 43% 92.9% 99.6% ECQ100170 EBC103096 95% 100% 100% ECQ100170 EBC103096 95% 100% 100% ECQ100170 EFA200421 41% 99.3% 99.7% ECO100170 ECO100170 100% 100% 100% ECO100170 HN100893 71% 98.9% 98.6% ECO100170 HPY101532 36% 99.3% 100% ECO100170 KPN301399 96% 100% 100% ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 MCA101252 52% 98.2% 97.6% ECO100170 MAV106405 40% <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
EC0100170 CAC101812 44% 98.9% 99.3% EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDP101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 EFA200421 41% 99.3% 99.7% EC0100170 EC0100170 100% 100% 100% EC0100170 HIN100893 71% 98.9% 98.6% EC0100170 HPY101532 36% 99.3% 100% EC0100170 KPN301399 96% 100% 100% EC0100170 LPN100716 52% 98.2% 98.6% EC0100170 LMO102014 45% 99.6% 100% EC0100170 MCA101252 52% 98.2% 97.6% EC0100170 MBV102285 39% 92.9% 99.6% EC0100170 MILP100972 37%					
EC0100170 CB0101301 42% 98.6% 99.0% EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDP101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 EFA200421 41% 99.3% 99.7% EC0100170 EC0100170 100% 100% 100% EC0100170 HIN100893 71% 98.9% 98.6% EC0100170 HPY101532 36% 99.3% 100% EC0100170 HPN301399 96% 100% 100% EC0100170 LPN100716 52% 98.2% 98.6% EC0100170 LMO102014 45% 99.6% 100% EC0100170 MCA101252 52% 98.2% 97.6% EC0100170 MAV106405 40% 92.9% 99.6% EC0100170 MLP100972 37% 92.9% 99.6% EC0100170 MCE010443 39%					
EC0100170 CDF101762 43% 99.3% 100% EC0100170 CDP101115 43% 92.9% 99.6% EC0100170 EBC103096 95% 100% 100% EC0100170 EFA200421 41% 99.3% 99.7% EC0100170 EC0100170 100% 100% 100% EC0100170 HIN100893 71% 98.9% 98.6% EC0100170 HPY101532 36% 99.3% 100% EC0100170 KPN301399 96% 100% 100% EC0100170 LPN100716 52% 98.2% 98.6% EC0100170 LMO102014 45% 99.6% 100% EC0100170 MCA101252 52% 98.2% 97.6% EC0100170 MAV106405 40% 92.9% 99.6% EC0100170 MBV102285 39% 92.9% 99.6% EC0100170 MTU202851 39% 92.9% 99.6% EC0100170 MPN100211 40%					
ECO100170 CDP101115 43% 92.9% 99.6% ECO100170 EBC103096 95% 100% 100% ECO100170 EFA200421 41% 99.3% 99.7% ECO100170 ECO100170 100% 100% 100% ECO100170 HIN100893 71% 98.9% 98.6% ECO100170 HPY101532 36% 99.3% 100% ECO100170 KPN301399 96% 100% 100% ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECO100170 MAV106405 40% 92.9% 99.6% ECO100170 MBV102285 39% 92.9% 99.6% ECO100170 MCP100972 37% 92.9% 99.6% ECO100170 MGE100443 39% 97.2% 98.0% ECO100170 MPN100211 40%				1	
ECO100170 EBC103096 95% 100% 100% ECO100170 EFA200421 41% 99.3% 99.7% ECO100170 ECO100170 100% 100% 100% ECO100170 HIN100893 71% 98.9% 98.6% ECO100170 HPY101532 36% 99.3% 100% ECO100170 KPN301399 96% 100% 100% ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECO100170 MAV106405 40% 92.9% 99.6% ECO100170 MBV102285 39% 92.9% 99.6% ECO100170 MTU202851 39% 92.9% 99.6% ECO100170 MGE100443 39% 97.2% 98.0% ECO100170 MPN100211 40% 97.2% 98.0% ECO100170 NGO100890 50%					
ECO100170 EFA200421 41% 99.3% 99.7% ECO100170 ECO100170 100% 100% 100% ECO100170 HIN100893 71% 98.9% 98.6% ECO100170 HPY101532 36% 99.3% 100% ECO100170 KPN301399 96% 100% 100% ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECO100170 MAV106405 40% 92.9% 99.6% ECO100170 MBV102285 39% 92.9% 99.6% ECO100170 MLP100972 37% 92.9% 99.6% ECO100170 MGE100443 39% 97.2% 98.0% ECO100170 MPN100211 40% 97.2% 98.0% ECO100170 NGO100890 50% 99.3% 99.6% ECO100170 NME200305 50%					
EC0100170 EC0100170 100% 100% EC0100170 HIN100893 71% 98.9% 98.6% EC0100170 HPY101532 36% 99.3% 100% EC0100170 KPN301399 96% 100% 100% EC0100170 LPN100716 52% 98.2% 98.6% EC0100170 LM0102014 45% 99.6% 100% EC0100170 MCA101252 52% 98.2% 97.6% EC0100170 MAV106405 40% 92.9% 99.6% EC0100170 MBV102285 39% 92.9% 99.6% EC0100170 MLP100972 37% 92.9% 99.6% EC0100170 MTU202851 39% 92.9% 99.6% EC0100170 MGE100443 39% 97.2% 98.0% EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NG0100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3%					
ECO100170 HIN100893 71% 98.9% 98.6% ECO100170 HPY101532 36% 99.3% 100% ECO100170 KPN301399 96% 100% 100% ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECQ100170 MAV106405 40% 92.9% 99.6% ECO100170 MBV102285 39% 92.9% 99.6% ECO100170 MLP100972 37% 92.9% 99.6% ECO100170 MTU202851 39% 92.9% 99.6% ECO100170 MGE100443 39% 97.2% 98.0% ECO100170 MPN100211 40% 97.2% 98.0% ECO100170 NGO100890 50% 99.3% 99.6% ECO100170 NME200305 50% 99.3% 99.6% ECO100170 PMU101985 74%					
ECO100170 HPY101532 36% 99.3% 100% ECO100170 KPN301399 96% 100% 100% ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECQ100170 MAV106405 40% 92.9% 99.6% ECO100170 MBV102285 39% 92.9% 99.6% ECO100170 MLP100972 37% 92.9% 99.6% ECO100170 MTU202851 39% 92.9% 99.6% ECO100170 MGE100443 39% 97.2% 98.0% ECO100170 MPN100211 40% 97.2% 98.0% ECO100170 NGO100890 50% 99.3% 99.6% ECO100170 NME200305 50% 99.3% 99.6% ECO100170 PMU101985 74% 99.3% 99.6%					
ECO100170 KPN301399 96% 100% 100% ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECO100170 MAV106405 40% 92.9% 99.6% ECO100170 MBV102285 39% 92.9% 99.6% ECO100170 MLP100972 37% 92.9% 99.6% ECO100170 MTU202851 39% 92.9% 99.6% ECO100170 MGE100443 39% 97.2% 98.0% ECO100170 MPN100211 40% 97.2% 98.0% ECO100170 NGO100890 50% 99.3% 99.6% ECO100170 NME200305 50% 99.3% 99.6% ECO100170 PMU101985 74% 99.3% 99.6%	ECO100170				
ECO100170 LPN100716 52% 98.2% 98.6% ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECQ100170 MAV106405 40% 92.9% 99.6% ECQ100170 MBV102285 39% 92.9% 99.6% ECQ100170 MLP100972 37% 92.9% 99.6% ECQ100170 MTU202851 39% 92.9% 99.6% ECQ100170 MGE100443 39% 97.2% 98.0% ECQ100170 MPN100211 40% 97.2% 98.0% ECQ100170 NGQ100890 50% 99.3% 99.6% ECQ100170 NME200305 50% 99.3% 99.6% ECQ100170 PMU101985 74% 99.3% 99.6%					
ECO100170 LMO102014 45% 99.6% 100% ECO100170 MCA101252 52% 98.2% 97.6% ECQ100170 MAV106405 40% 92.9% 99.6% ECO100170 MBV102285 39% 92.9% 99.6% ECQ100170 MLP100972 37% 92.9% 99.6% ECQ100170 MTU202851 39% 92.9% 99.6% ECQ100170 MGE100443 39% 97.2% 98.0% ECQ100170 MPN100211 40% 97.2% 98.0% ECQ100170 NGQ100890 50% 99.3% 99.6% ECQ100170 NME200305 50% 99.3% 99.6% ECQ100170 PMU101985 74% 99.3% 99.6%					
ECO100170 MCA101252 52% 98.2% 97.6% EC0100170 MAV106405 40% 92.9% 99.6% EC0100170 MBV102285 39% 92.9% 99.6% EC0100170 MLP100972 37% 92.9% 99.6% EC0100170 MTU202851 39% 92.9% 99.6% EC0100170 MGE100443 39% 97.2% 98.0% EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NGO100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%					
EC0100170 MAV106405 40% 92.9% 99.6% EC0100170 MBV102285 39% 92.9% 99.6% EC0100170 MLP100972 37% 92.9% 99.6% EC0100170 MTU202851 39% 92.9% 99.6% EC0100170 MGE100443 39% 97.2% 98.0% EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NGO100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%					
EC0100170 MBV102285 39% 92.9% 99.6% EC0100170 MLP100972 37% 92.9% 99.6% EC0100170 MTU202851 39% 92.9% 99.6% EC0100170 MGE100443 39% 97.2% 98.0% EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NGO100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%					
EC0100170 MLP100972 37% 92.9% 99.6% EC0100170 MTU202851 39% 92.9% 99.6% EC0100170 MGE100443 39% 97.2% 98.0% EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NGO100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%					
EC0100170 MTU202851 39% 92.9% 99.6% EC0100170 MGE100443 39% 97.2% 98.0% EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NGO100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%	ECO100170	MBV102285			
EC0100170 MGE100443 39% 97.2% 98.0% EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NGO100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%	ECO100170	MLP100972	37%	92.9%	
EC0100170 MPN100211 40% 97.2% 98.0% EC0100170 NG0100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%	ECO100170	MTU202851	39%	92.9%	99.6%
EC0100170 NG0100890 50% 99.3% 99.6% EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%	ECO100170	MGE100443	39%	97.2%	98.0%
EC0100170 NME200305 50% 99.3% 99.6% EC0100170 PMU101985 74% 99.3% 99.6%	ECO100170	MPN100211	40%	97.2%	98.0%
ECO100170 PMU101985 74% 99.3% 99.6%	ECO100170	NGO100890	50%	99.3%	99.6%
	ECO100170	NME200305	50%	99.3%	99.6%
ECO100170 PRT104501 74% 99.3% 100%	ECO100170	PMU101985	74%	<u> </u>	99.6%
1770 10070	ECO100170	PRT104501	74%	99.3%	100%

Query LocusID ECO100170	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
		57%	98.2%	97.6%
	PAE203653	58%	98.2%	97.6%
ECO100170	PPU107887	58%	98.2%	97.6%
ECO100170	PSY104373	96%	100%	100%
ECO100170	SPA101193	96%	100%	100%
ECO100170	STY103870		100%	100%
ECO100170	STM103563	96%	99.3%	100%
ECO100170	SAU801257	43%	98.2%	99.3%
ECO100170	SEP201550	43%	98.2%	99.3%
ECO100170	SHA100714	43%	98.2%	97.7%
ECO100170	SMU100627	38%	98.2%	97.7%
ECO100170	SPN402016	39%		97.7%
ECO100170	SPY201600	38%	98.2%	95.9%
ECO100170	TPA100598	30%	90.8%	
ECO100170	UUR100520	39%	97.9%	99.0%
ECO100170	VCH102225	70%	98.2%	98.9%
ECO100170	YPS001128	77%	100%	100%
ECO100171	ABA101328	60%	99.2%	100%
ECO100171	BAN107431	43%	97.5%	98.3%
ECO100171	BAN103009	48%	97.5%	98.3%
ECO100171	BFR104169	53%	90.0%	98.6%
ECQ100171	BPT101110	55%	95.9%	97.1%
ECO100171	BCE109906	58%	95.9%	97.5%
ECO100171	BFU100279	57%	. 95.9%	97.5%
ECO100171	BMA109323	57%	95.9%	97.5%
ECO100171	CJU101199	49%	92.9%	94.1%
ECO100171	CPN200046	38%	96.3%	94.0%
ECO100171	CTR200049	38%	88.4%	88.2%
ECQ100171	CAC103602	49%	96.7%	97.9%
ECO100171	CBO103420 ·	47%	97.5%	97.9%
ECO100171	CDF101760	47%	97.1%	98.7%
ECO100171	CDP101114	44%	97.9%	96.7%
ECO100171	EBC103094	97%	100%	100%
ECO100171	EFA200424	48%	97.1%	97.9%
ECO100171	ECO100171	100%	100%	100%
ECQ100171	HIN101042	77%	97.5%	99.2%
EC0100171	HPY100764	51%	93.8%	94.6%
ECO100171	KPN301400	98%	100%	100%
EC0100171	LPN101596	61%	95.9%	93.9%
ECO100171	LMO102234	47%	96.7%	97.1%
ECO100171	MCA100778	60%	98.3%	98.8%
ECO100171	MAV106392	46%	96.3%	87.2%
ECO100171	MBV102299	45%	96.3%	88.5%
ECO10017.1	MLP100970	46%	96.3%	82.8%
ECO100171	MTU202845	45%	96.3%	88.5%
ECO100171	MGE100444	35%	90.9%	90.5%
EC0100171	MPN100210	34%	95.0%	97.9%
	NGO100888	53%	95.9%	96.7%
	NME200304	53%	95.9%	96.7%
	PMU101986	79%	98.3%	97.9%
			99.6%	99.2%
				96.3%
EC0100171	SPA101722	94%	47.3%	100%
EC0100171 EC0100171 EC0100171 EC0100171	MBV102299 MLP100970 MTU202845 MGE100444 MPN100210 NGO100888 NME200304	46% 45% 35% 34% 53% 53%	96.3% 96.3% 90.9% 95.0% 95.9% 95.9% 98.3%	82.8% 88.5% 90.5% 97.9% 96.7% 97.9% 99.2%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100171	STY103871	98%	100%	100%
ECO100171	STM103564	98%	100%	100%
ECO100171	SAU801258	44%	96.7%	97.5%
ECO100171	SEP201551	45%	100%	100%
ECO100171	SHA100715	45%	100%	90.9%
ECO100171	SMU101143	47%	97.5%	96.3%
ECO100171	SPN400845	49%	97.9%	96.0%
ECO100171	SPY200331	48%	97.5%	97.5%
ECO100171	TPA100098	31%	25.3%	24.3%
ECO100171	UUR100519	35%	96.3%	98.7%
ECO100171	VCH102224	85%	100%	99.2%
ECO100171	YPS001129	90%	100%	100%
ECO100179	ABA101312	39%	97.7%	99.1%
ECO100179	BFR105934	35%	97.1%	96.0%
ECO100179	BPT101128	42%	91.5%	89.3%
ECO100179	BCE111319	41%	99.1%	98.3%
ECO100179	BFU114742	39%	96.5%	92.7%
ECO100179	BMA109885	39%	97.4%	96.1%
ECO100179	CJU100537	34%	95.3%	99.7%
ECO100179	CPN200450	34%	98.5%	94.7%
ECO100179	CTR200507	33%	99.1%	96.9%
ECO100179	CBO103766	28%	23.8%	84.3%
ECO100179	EBC103091	89%	100%	100%
ECO100179	ECO100179	100%	100%	100%
EC0100179	HIN100894	65%	98.5%	99.1%
ECO100179	HPY100193	31%	90.9%	91.4%
ECO100179	KPN301403	92%	90.6%	100%
ECO100179	LPN102597	35%	99.1%	99.7%
ECO100179	MCA100324	44%	87.7%	90.8%
ECO100179	NGO100826	38%	97.7%	96.3%
ECO100179	NME200082	38%	97.7%	96.3%
EC0100179	PMU101994	65%	98.2%	98.5%
ECO100179	PRT101247	80%	100%	99.7%
ECO100179	PAE203644	51%	98.2%	94.9%
ECO100179	PPU101150	49%	98.5%	95.7%
EC0100179	PSY104345	50%	98.2%	95.4%
ECO100179	SPA100512	85%	83.6%	58.2%
EC0100179	STY103879	95%	100%	100%
ECO100179	STM103592	95%	100%	100%
EC0100179	VCH102216	64%	100%	97.2%
EC0100179	YPS001147	82%	99.7%	100%
ECO100180	ABA101324	44%	94.0%	100%
ECO100180	BAN112058	43%	56.3%	92.2%
ECO100180	BAN101529	48%	92.1%	95.1%
ECO100180	BPT101129	51%	92.1%	94.7%
ECO100180	BCE105358	58%	96.0%	94.2%
ECO100180	BFU107782	52%	96.0%	93.5%
EC0100180	BFU105730	55%	96.7%	94.8%
ECO100180	BMA107929	57%	96.0%	94.2%
ECO100180	CJU100245	47%	90.1%	94.5%
ECO100180	CPN200094	44%	92.1%	91.5%
ECO100180	CTR200808	43%	90.1%	89.5%
ECO100180	CAC102008	45%	89.4%	94.3%
ECO100180	CBO103374	45%	90.7%	93.8%
			J	

551

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100180	CDF104046	51%	25.8%	97.5%
ECO100180	CDF101479	42%	57.6%	95.5%
ECO100180	CDF100018	52%	78.8%	96.7%
ECO100180	EBC103090	93%	39.1%	78.7%
ECO100180	EBC100020	91%	57.0%	84.3%
ECO100180	EBC100023	91%	57.0%	84.3%
ECO100180	EFA203430	50%	90.1%	95.0%
ECO100180	EFM202041	50%	90.1%	96.4%
ECO100180	ECO100180	100%	100%	100%
EC0100180	HIN101039	68%	92.7%	93.9%
ECO100180	HPY101356	46%	88.7%	86.8%
ECQ100180	KPN301913	97%	100%	100%
ECO100180	LPN101746	52%	84.8%	89.0%
ECO100180	LMO100873	51%	93.4%	96.5%
ECO100180	MCA100038	44%	96.0%	83.4%
ECO100180	MBV105275	29%	45.0%	31.9%
ECO100180	NGO100839	55%	92.7%	94.0%
ECO100180	NME200083	55%	92.7%	94.0%
ECO100180	PMU101995	70%	96.7%	95.4%
ECO100180	PRT101246	83%	97.4%	85.5%
ECO100180	PAE203643	54%	94.0%	98.6%
ECO100180	PPU101164	57%	92.1%	96.6%
ECO100180	PSY104344	56%	94.0%	98.6%
ECO100180	SPA100773	99%	100%	100%
ECO100180	STY103910	99%	100%	100%
ECO100180	STM103593	98%	100%	100%
ECO100180	SAU802098	46%	89.4%	91.1%
ECO100180	SEP204192	44%	89.4%	91.7%
ECO100180	SHA100083	38%	35.8%	93.1%
ECO100180	SMU100534	46%	92.1%	97.1%
ECO100180	SPN400384	46%	92.1%	97.1%
ECO100180	SPY201345	46%	92.1%	97.8%
ECO100180	VCH102215	64%	97.4%	96.1%
ECQ100180	YPS001148	89%	100%	83.4%
ECO100183	ABA101887	65%	93.4%	98.9%
ECO100183	BAN111817	53%	82.3%	68.9%
ECO100183	BAN113438	54%	90.9%	69.6%
EC0100183	BFR12457	51%	88.4%	87.6%
ECO100183	BPT101141	58%	93.4%	92.0%
ECO100183	BBU100046	37%	89.4%	98.3%
ECO100183	BCE104245	60%	94.4%	87.4%
ECO100183	BFU105066	58%	92.4%	74.2%
ECO100183	BMA107189	60%	94.4%	87.4%
ECO100183	CJU100010	38%	87.9%	88.5%
ECO100183	CPN200642	41%	96.0%	88.8%
ECO100183	CTR200293	46%	92.4%	84.3%
ECO100183	CAC100322	41%	89.4%	71.7%
ECO100183	CBO102656	41%	91.9%	69.1%
ECO100183	CDF100890	49%	88.9%	69.0%
ECO100183	CDP101132	45%	79.8%	93.6%
ECO100183	EBC102552	89%	100%	100%
ECO100183	EFA201281	50%	91.9%	71.0%
ECO100183	EFM202475	51%	91.9%	72.1%
ECO100183	ECO100183	100%	100%	100%

O 02/07/183	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
Query LocusID ECO100183	HIN101036	72%	96.5%	98.0%
ECO100183	HPY101305	33%	92.9%	91.9%
ECO100183	KPN301923	89%	100%	99.5%
ECO100183	LPN101418	62%	90.9%	93.2%
ECO100183	LMO102644	47%	91.9%	69.3%
ECO100183	MCA101524	38%	90.9%	85.8%
ECO100183	MAV102888	46%	91.4%	76.6%
ECO100183	MBV102296	48%	91.4%	69.3%
ECO100183	MLP100982	48%	91.4%	75.4%
ECO100183	MTU202864	48%	91.4%	69.3%
ECO100183	NGO100782	61%	92.9%	95.4%
ECO100183	NME200070	61%	92.9%	95.4%
ECO100183	PMU101998	72%	96.5%	97.5%
ECO100183	PRT101243	75%	98.5%	99.5%
ECO100183	PAE203640	71%	94.4%	93.0%
ECO100183	PPU101167	72%	92.4%	88.4%
ECO100183	PSY106718	71%	92.4%	82.4%
ECO100183	STY103913	92%	100%	100%
ECO100183	STM103913	92%	100%	100%
ECO100183	SAU801244	44%	92.9%	71.8%
ECO100183	SEP201538	45%	91.4%	69.2%
	SHA101009	43%	91.4%	70.6%
ECO100183	SMU100101	45%	93.4%	71.9%
ECO100183		49%	91.4%	69.5%
EC0100183	SPN401044	46%	90.9%	69.2%
ECO100183	SPY200888	35%	38.9%	25.3%
ECO100183	UUR100400	73%	93.9%	90.3%
ECO100183	VCH102212 YPS001153	84%	97.5%	97.5%
ECO100183	ABA101411	48%	99.6%	96.4%
ECO100184	BAN112326	36%	99.2%	99.5%
EC0100184	BFR102018	33%	96.8%	95.0%
ECO100184	BPT101552	48%	99.7%	99.3%
ECO100184		38%	99.2%	98.1%
ECO100184	BBU100578	49%	99.2%	100%
ECO100184	BCE115231	47%	99.9%	99.7%
ECO100184	BFU107633			100%
ECO100184	BMA101634	48%	99.9%	88.7%
ECO100184	CJU100668	39%	89.9%	89.8%
EC0100184	CPN200079	37%	92.5%	
ECO100184	CTR200821	36%	92.5%	90.0%
ECO100184	CAC103161	39%	90.5%	
ECO100184	CBO100607	34%	99.7%	99.8%
ECO100184	CBO101196	35%	99.6%	99.2%
ECO100184	CDF101163	40%	92.2%	91.0%
ECO100184	CDP101233	34%	98.8%	99.1%
ECO100184	.EBC102553	94%	100%	100%
ECO100184	EFA202115	32%	96.2%	96.7%
ECO100184	EFM200294	32%	99.1%	99.5%
ECO100184	ECO100184	100%	100%	100%
ECO100184	HIN100720	71%	99.9%	99.8%
ECO100184	HPY101439	39%	92.5%	91.3%
ECO100184	KPN301922	95%	100%	100%
ECO100184	LPN102982	56%	99.6%	99.7%
ECO100184	LMO100629	35%	99.4%	99.8%
ECO100184	MCA102321	49%	89.4%	86.7%

V O 02/07/100		<u></u>		1 C 17 O 3 O 2 7 O 3 O 7
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100184	MAV100203	34%	7.7%	90.7%
ECO100184	MAV103371	35%	99.2%	99.5%
ECO100184	MBV102577	35%	97.8%	99.1%
ECO100184	MLP100747	35%	99.2%	99.5%
ECO100184	MTU201526	36%	98.8%	98.7%
ECO100184	MGE100266	27%	72.6%	89.6%
ECO100184	MPN100459	36%	18.4%	19.4%
ECO100184	NGO101860	47%	99.9%	100%
ECO100184	NME200585	47%	99.9%	100%
ECO100184	PMU100034	71%	99.9%	99.8%
ECO100184	PRT101242	85%	98.6%	100%
ECO100184	PAE203638	58%	99.5%	99.6%
ECO100184	PPU100137	58%	99.9%	99.9%
ECO100184	PSY104339	57%	99.5%	99.6%
ECO100184	SPA100912	92%	99.3%	100%
ECO100184	STY103914	96%	100%	100%
ECO100184	STM103627	96%	100%	100%
ECO100184	SAU801703	33%	93.0%	93.8%
ECO100184	SEP201707	33%	92.0%	92.4%
EC0100184	SHA100359	33%	96.0%	94.2%
ECO100184	SMU101018	30%	90.8%	92.0%
ECO100184	SPN400795	31%	95.3%	95.0%
EC0100184	SPY200987	29%	96.2%	96.8%
ECO100184	TPA100661	39%	92.8%	90.7%
ECO100184	UUR100419	29%	87.0%	94.4%
EC0100184	VCH102211	76%	100%	99.6%
ECO100184	YPS001155	88%	100%	99.1%
EC0100185	ABA100308	57%	80.9%	94.1%
ECO100185	BAN105768	55%	97.8%	95.4%
ECO100185	BPT101398	64%	99.4%	97.8%
EC0100185	BCE106451	64%	99.4%	97.2%
ECO100185	BFU100947	64%	99.4%	97.2%
EC0100185	BMA107589	64%	99.4%	97.2%
ECO100185	CJU100411	49%	98.4%	97.8%
ECQ100185	CPN200335	44%	98.7%	96.3%
ECO100185	CTR200529	45%	98.7%	96.3%
EC0100185	CAC100492	52%	81.8%	95.3%
	CBO102220	51%	89.3%	50.3%
ECO100185	CDF101403		96.6%	97.1%
ECO100185		50%		
ECO100185	EBC102554	96%	100%	100%
ECO100185	EFA200247	52%	79.6%	96.9%
ECO100185	EFM200190	55%	81.5%	99.6%
ECQ100185	ECO100185	100%	100%	100%
ECO100185	HIN100386	74%	99.7%	99.7%
ECO100185	HPY100550	48%	98.1%	96.8%
ECO100185	KPN301921	96%	100%	100%
ECO100185	LPN101352	62%	84.0%	99.3%
ECO100185	LMO100159	52%	98.4%	97.8%
ECO100185	MCA100190	60%	80.3%	100%
ECO100185	MLP100072	28%	46.4%	27.9%
ECO100185	NGO100369	64%	98.1%	97.2%
ECO100185	NME201237	64%	98.1%	97.2%
ECO100185	PMU100292	75%	99.7%	99.7%
ECO100185	PRT100667	69%	99.7%	99.7%

554

O === T ==== ID	TIIIID	Idontita	Query Coverage	Homolog Coverage
Query LocusID	Homolog LocusID	Identity 88%	99.7%	99.7%
ECO100185	PRT101241 PAE203637	69%	99.4%	99.4%
ECO100185		67%	99.4%	99.7%
ECO100185	PPU101171	67%	99.4%	99.1%
ECO100185	PSY108491	80%	88.4%	100%
ECO100185	SPA100816		100%	100%
ECO100185	STY103916	97%	100%	100%
ECO100185	STM103628	97%	97.8%	98.4%
ECO100185	SAU801700	52%		
ECO100185	SEP201704	52%	97.8%	98.4%
ECO100185	SHA100923	52%	97.8%	98.1%
ECO100185	SMU100529	54%	79.9%	98.0%
ECO100185	SPN400387	50%	79.9%	98.4%
ECO100185	SPY201342	52%	79.9%	98.0%
ECO100185	VCH102210	75%	99.7%	99.7%
ECO100185	YPS001157	90%	99.7%	99.7%
ECO100193	CJU100189	40%	16.1%	23.4%
ECO100193	ECO100193	100%	100%	100%
ECO100193	KPN300059	73%	55.8%	100%
EC0100193	KPN301914	66%	88.7%	92.5%
ECO100193	TPA100217	26%	29.1%	82.4%
ECO100193	YPS000139	43%	83.6%	84.2%
EC0100194	ABA100529	68%	99.3%	100%
ECO100194	BAN100354	47%	99.0%	99.3%
ECO100194	BAN103931	51%	99.8%	100%
EC0100194	BFR100495	28%	33.2%	0.2%
ECO100194	BPT102439	60%	96.7%	96.5%
ECO100194	BBU100401	28%	87.1%	65.4%
ECO100194	BCE111561	67%	38.6%	99.5%
ECO100194	BFU106495	56%	99.8%	99.1%
ECO100194	BMA104091	56%	99.8%	99.1%
ECO100194	СЈU100505	45%	99.7%	99.6%
ECO100194	CPN200251	43%	97.4%	97.5%
ECO100194	CTR200662	39%	99.7%	97.9%
ECO100194	CAC100467	49%	98.4%	97.4%
ECO100194	CBO100123	28%	98.6%	98.3%
ECO100194	CDF100404	47%	12.8%	76.6%
ECO100194	CDF100250	47%	98.6%	97.5%
EC0100194	CDP100483	40%	99.5%	99.1%
EC0100194	EBC102546	93%	99.8%	100%
EC0100194	EFA200454	47%	96.7%	95.8%
ECO100194	EFM201684	47%	99.0%	98.6%
EC0100194	ECO100194	100%	100%	100%
ECO100194	HIN100709	75%	99.7%	99.5%
EC0100194	HPY100234	39%	99.8%	99.7%
EC0100194	KPN301911	94%	96.0%	100%
ECO100194	LPN102483	71%	16.4%	100%
ECO100194	LMO100624	49%	99.0%	98.8%
ECO100194	MCA101839	. 60%	98.4%	99.5%
EC0100194	MAV102826	40%	97.4%	97.6%
EC0100194	MBV103229	40%	97.4%	97.6%
EC0100194	MLP100951	27%	93.0%	73.1%
EC0100194 EC0100194	MTU202807	40%	97.7%	97.3%
EC0100194	NGO100106	60%	98.4%	98.4%
EC0100194	NME201412	60%	98.4%	98.4%
1500100194	111111111111111111111111111111111111111	1 00/0	70.470	70.770

WO 02/077183 PCT/US02/09107

Output Coverage Homolog Coverage

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100194	PMU101370	76%	99.0%	98.9%
ECO100194	PRT101177	79%	99.7%	99.8%
ECO100194	PAE200955	71%	99.7%	99.6%
ECO100194	PPU108855	68%	96.5%	99.6%
ECO100194	PSY105509	67%	99.8%	99.8%
ECO100194	SPA100809	89%	98.4%	100%
ECO100194	STY103990	95%	100%	100%
ECO100194	SAU801263	44%	99.5%	99.1%
ECO100194	SEP201556	46%	99.8%	99.5%
ECO100194	SHA101150	47%	98.3%	97.9%
ECO100194	SMU101082	40%	99.0%	99.2%
ECO100194	SPN400243	42%	99.0%	99.0%
ECO100194	SPY201510	41%	99.0%	98.9%
ECO100194	TPA100158	40%	93.7%	93.7%
ECO100194	VCH100859	71%	99.0%	99.1%
ECO100194	YPS002005	84%	99.8%	99.8%
ECO100195	ABA103785	37%	94.5%	93.0%
EC0100195	BAN110343	34%	40%	58.0%
EC0100195	CBO101676	39%	39.6%	91.4%
EC0100195	CDF101307	33%	43.8%	65.2%
EC0100195	EBC102547	82%	100%	100%
EC0100195	ECO100195	100%	100%	100%
EC0100195	HIN100489	51%	94.5%	92.9%
EC0100193 EC0100195	KPN301908	85%	100%	100%
EC0100193 EC0100195	MCA100700	39%	74.9%	93.7%
ECO100193 ECO100195	NGO100030	42%	98.7%	98.2%
ECO100193 ECO100195	NME200229	42%	96.2%	95.6%
ECO100193	PMU101170	54%	93.6%	89.4%
EC0100195	PRT101178	62%	100%	100%
	PAE203386	48%	90.2%	89.6%
ECO100195	PPU108086	47%	90.2%	90%
ECO100195	PSY104415	45%	95.3%	95.2%
ECO100195		89%	37.9%	100%
ECO100195	SPA100206	88%	100%	100%
ECO100195	STY103991		98.3%	99.1%
ECO100195	VCH100860	52%		
ECO100195	YPS002007	71%	100%	100%
ECO100197	ABA101419	34%	88.6%	99.2%
ECO100197	ABA101431	41%	81.9%	81.2%
ECO100197	BAN110744	44%	91.5%	96.2%
ECO100197	BAN101917	44%	94.5%	96.3%
ECO100197	BPT102034	47%	100%	100%
EC0100197	BCE106577	56%	87.1%	80.3%
ECO100197	BFU102067	50%	96.3%	95.9%
ECO100197	BMA104983	54%	97.0%	96.3%
ECO100197	CJU100709	37%	85.6%	89.9%
ECO100197	CJU101125	41%	80.4%	81.3%
ECO100197	CJU100710	42%	84.9%	87.9%
ECO100197	CJU100711	45%	82.3%	86.0%
ECO100197	CPN200473	31%	93.0%	93.8%
ECO100197	CAC100740	40%	95.2%	93.4%
ECO100197	CBO102481	33%	92.3%	92.6%
ECO100197	CBO101824	41%	94.5%	94.1%
ECO100197	CBO103909	45%	91.9%	92.2%
ECO100197	CDF100529	43%	97.8%	98.5%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100197	CDP100114	31%	98.2%	91.7%
ECO100197	CDP100115	32%	94.5%	88.3%
ECO100197	EBC102539	96%	100%	100%
ECO100197	EFA201785	40%	98.2%	97.5%
ECO100197	EFM201963	38%	98.2%	97.2%
ECO100197	ECO100197	100%	100%	100%
ECO100197	HIN100600	60%	98.9%	99.6%
ECO100197	HPY101541	42%	97.4%	97.8%
ECO100197	KPN301905	95%	100%	100%
ECO100197	LPN100686	45%	95.2%	98.8%
ECO100197	LMO100978	47%	94.5%	93.8%
ECO100197	MCA103679	55%	98.5%	99.3%
ECO100197	NGO101326	37%	96.3%	94.1%
ECO100197	NME200471	38%	96.3%	94.1%
ECO100197	PMU101730	58%	98.9%	99.6%
ECO100197	PRT100159	78%	100%	100%
ECO100197	PAE205500	47%	78.6%	81.2%
ECO100197	PPU101952	47%	78.6%	82.4%
ECO100197	PSY101363	51%	78.6%	82.1%
ECO100197	SPA101556	37%	88.2%	87.3%
ECO100197	STY103993	96%	100%	100%
ECO100197	STM100616	37%	88.2%	87.3%
ECO100197	SAU800839	36%	97.0%	98.2%
ECO100197	SEP201451	37%	97.0%	98.1%
ECO100197	SHA100334	38%	92.6%	93.0%
ECO100197	SHA101832	35%	97.0%	97.4%
ECO100197	SMU100488	33%	93.4%	93.6%
ECO100197	SPN400147	35%	96.7%	97.5%
ECO100197	SPY200233	36%	100%	100%
ECO100197	TPA100812	34%	98.9%	98.5%
ECO100197	VCH100889	68%	100%	97.8%
ECO100197	YPS002011	90%	100%	100%
ECO100198	ABA101423	45%	100%	99.1%
ECO100198	BAN105551	52%	76.0%	81.3%
EC0100198	BAN106583	47%	96.3%	94.6%
ECO100198	BPT103178	52%	100%	100%
ECO100198	BCE112661	54%	98.2%	100% 95.2%
ECO100198	BFU102065	54%	98.2%	100%
ECO100198 ECO100198	BMA106456	44%	89.4%	64.0%
EC0100198	CJU100712 CPN200472	36%	95.9%	94.1%
ECO100198	CAC101527	43%	96.3%	95.9%
EC0100198	CBO103376	48%	95.9%	98.6%
EC0100198	CDF100530	48%	92.6%	92.2%
EC0100198	CDP100330	39%	94.5%	91.1%
EC0100198	EBC102541	97%	100%	100%
ECO100198	EFA201706	46%	93.5%	89.0%
ECO100198	EFM202483	44%	94.9%	91.2%
ECO100198	ECO100198	100%	100%	100%
ECO100198	HPY101554	43%	96.3%	96.7%
ECO100198	KPN301904	95%	100%	100%
ECO100198	LPN101477	53%	99.1%	99.1%
ECO100198	LMO100259	45%	98.2%	95.5%
ECO100198	MCA103062	45%	98.6%	93,9%
	1			4

Ouery LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100198	NGO101323	43%	96.3%	91.7%
EC0100198	NME200470	43%	96.3%	91.7%
EC0100198	PMU101729	49%	95.4%	90.8%
ECO100198	PRT100130	83%	100%	100%
EC0100198	PAE202349	48%	98.6%	98.6%
ECO100198	PPU109980	50%	97.7%	100%
EC0100198	PSY103687	48%	98.2%	94.7%
ECO100198	SPA100613	90%	85.3%	100%
EC0100198	STY103994	92%	97.7%	100%
ECO100198	STM100618	44%	93.5%	92.7%
EC0100198	SAU800463	50%	95.9%	95.0%
EC0100198	SEP201771	50%	95.9%	95.0%
EC0100198	SHA100333	46%	98.6%	89.0%
EC0100198	SMU100477	40%	97.2%	90.8%
EC0100198	SPN400150	41%	94.5%	88.7%
EC0100198	SPY200235	42%	94.5%	92.7%
EC0100198	TPA100118	40%	95.4%	95.0%
ECO100198	VCH100890	53%	96.8%	93.3%
EC0100198	YPS002016	90%	100%	100%
EC0100198	ABA104598	65%	100%	100%
EC0100201	BPT102715	65%	100%	100%
		66%	99.3%	93.6%
EC0100201	BCE100085	90%	85.4%	97.9%
ECO100201	EBC100779		100%	100%
EC0100201	ECO100201	100%		100%
ECO100201	KPN301057	90%	100%	
ECO100201	PRT104732	81%	100%	100%
ECO100201	PAE204164	65%	99.3%	97.4%
EC0100201	PPU111521	67%	100%	100%
ECO100201	SPA101642	90%	100%	100%
ECO100201	STY104030	91%	100%	100%
ECO100201	STM103710	92%	100%	100%
ECO100201	YPS002027	75%	100%	100%
ECO100223	BAN108547	31%	33.0%	38.5%
ECO100223	BAN105487	31%	44.4%	80%
EC0100223	ECO100223	100%	100%	100%
EC0100223	VCH100877	26%	64.8%	54.4%
EC0100223	YPS002852	49%	94.3%	84.2%
EC0100236	ABA101495	43%	99.5%	97.9%
ECO100236	BAN105079	42%	96.2%	95.7%
EC0100236	BAN100068	43%	98.6%	98.1%
ECO100236	BFR101900	41%	97.1%	96.9%
ECO100236	BPT102346	44%	99.8%	98.3%
ECO100236	BCE107136	45%	98.3%	89.0%
ECO100236	BMA109567	45%	98.3%	89.7%
ECO100236	CJU100520	38%	97.6%	97.8%
ECO100236	CAC102032	47%	97.8%	96.7%
ECO100236	. CDP101216	45%	96.2%	93.5%
ECO100236	EBC103210	88%	100%	100%
ECO100236	EFA200208	46%	99.8%	99.3%
ECO100236	EFM200382	46%	99.5%	99.0%
ECO100236	ECO100236	100%	100%	100%
ECO100236	HIN101211	62%	99.8%	99.8%
ECO100236	KPN302476	86%	100%	100%
ECO100236	LPN100519	40%	98.1%	97.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100236	LMO101153	46%	99.5%	99.0%
ECO100236	MAV103439	48%	96.9%	90.1%
ECO100236	MBV104414	47%	96.6%	93.3%
ECO100236	MLP100899	45%	97.8%	96.8%
EC0100236	MTU202391	47%	96.6%	93.3%
ECO100236	NGO101136	44%	97.8%	97.4%
ECO100236	NME201166	45%	97.8%	97.4%
ECO100236	PMU100936	65%	99.8%	99.0%
EC0100236	PRT105196	71%	99.8%	99.8%
ECO100236	PAE204004	48%	99.5%	97.9%
ECO100236	PPU112135	43%	96.2%	98.5%
ECQ100236	PSY105063	45%	99.5%	97.4%
ECO100236	SPA104265	83%	100%	100%
ECO100236	STY104449	86%	100%	100%
ECO100236	STM103861	86%	100%	100%
EC0100236	SMU101435	48%	99.8%	99.3%
EC0100236	SPN400833	46%	97.4%	97.1%
EC0100236	SPY201284	47%	99.5%	99.0%
ECO100236	TPA100346	44%	97.6%	97.9%
EC0100236	VCH102239	58%	99.8%	99.3%
ECO100236	YPS002651	72%	100%	99.5%
		50%	89.2%	65.3%
ECO100239	BFU102395			100%
ECO100239	EBC103227	98%	63.9%	
ECO100239	ECO102590	81%	90.5%	89.4%
ECO100239	ECO101961	81%	93.7%	100%
ECO100239	ECO100239	100%	100%	100%
ECO100239	LPN103162	46%	66.5%	95.5%
ECO100239	SEP200678	37%	43.7%	65.7%
ECO100240	EBC103228	85%	100%	72.0%
ECO100240	ECO100240	100%	100%	100%
ECO100240	KPN202940	29%	86.8%	94.4%
ECO100240	KPN204064	29%	87.5%	95.7%
ECO100240	KPN200664	29%	86.8%	94.4%
ECO100240	PRT102844	43%	73.7%	100%
ECO100245	EBC103236	92%	99.7%	100%
ECO100245	ECO100245	100%	100%	100%
ECQ100245	NME200125	22%	84.0%	81.8%
ECO100255	ABA104682	35%	80.8%	32.0%
ECO100255	ECO100255	100%	100%	100%
ECO100255	HIN100123	. 69%	83.3%	28.0%
ECO100255	PMU100956	75%	85.8%	25.5%
ECO100255	PRT102521	90%	85.8%	26.2%
ECO100255	VCH103408	81%	85.8%	25%
ECO100256	EBC101194	98%	31.7%	100%
ECO100256	EBC101311	92%	47.3%	98.8%
ECO100256	EBC103715	88%	58.1%	100%
ECO100256	EBC103943	90%	74.9%	100%
ECO100256	EBC104524	90%	74.9%	100%
ECQ100256	EBC103604	99%	100%	100%
ECO100256	ECO100266	100%	100%	100%
ECO100256	ECO100256	100%	100%	100%
ECO100256	KPN302635	99%	100%	100%
ECO100256	KPN301602	99%	100%	100%
ECO100256	KPN303307	99%	100%	100%
				

ECO100256 KPN306562 99% 100% 10 ECO100256 KPN308721 99% 100% 10 ECO100256 KPN302324 99% 100% 10 ECO100256 KPN301257 97% 47.9% 10 ECO100256 KPN301257 97% 47.9% 10 ECO100256 KPN300832 91% 56.3% 10 ECO100256 KPN300832 91% 56.3% 10 ECO100256 KPN3008593 96% 98.8% 10 ECO100256 KPN3003573 99% 100% 10 ECO100256 KPN300875 99% 100% 10 ECO100256 KPN300875 99% 100% 10 ECO100256 STY104877 99% 100% 10 ECO100256 STY104954 99% 100% 10 ECO100257 EBC103602 100% 100% 10 ECO100257 ECO100257 100% 100% 10 <	omolog Coverage 00% 00% 00% 00% 00% 00% 00% 00% 00% 00
ECO100256 KPN308721 99% 100% 10 ECO100256 KPN302324 99% 100% 10 ECO100256 KPN301774 99% 100% 10 ECO100256 KPN301257 97% 47.9% 10 ECO100256 KPN300322 91% 56.3% 10 ECO100256 KPN300593 96% 98.8% 10 ECO100256 KPN300593 96% 98.8% 10 ECO100256 KPN300357 99% 100% 10 EC0100256 KPN300875 99% 100% 10 EC0100256 KPN300875 99% 100% 10 EC0100256 STY104877 99% 100% 10 EC0100256 STY104954 99% 100% 10 EC0100257 EBC103602 100% 100% 10 EC0100257 EC0100257 100% 100% 10 EC0100257 KPN30225 100% 100% 10 <td>00% 00% 00% 00% 00% 00% 00% 00% 00% 00%</td>	00% 00% 00% 00% 00% 00% 00% 00% 00% 00%
EC0100256 KPN302324 99% 100% 10 EC0100256 KPN301774 99% 100% 10 EC0100256 KPN301257 97% 47.9% 10 EC0100256 KPN300832 91% 56.3% 10 EC0100256 KPN3002225 100% 65.9% 10 EC0100256 KPN3002225 100% 98.8% 10 EC0100256 KPN3002471 99% 100% 10 EC0100256 KPN300357 99% 100% 10 EC0100256 KPN300875 99% 100% 10 EC0100256 STY100327 99% 100% 10 EC0100256 STY104877 99% 100% 10 EC0100256 STY104954 99% 100% 10 EC0100257 EBC103602 100% 100% 10 EC0100257 EC0100257 100% 100% 10 EC0100257 KPN302325 100% 100% 10	00% 00% 00% 00% 00% 00% 00% 00% 00% 00%
ECO100256 KPN301774 99% 100% 10 ECO100256 KPN301257 97% 47.9% 10 ECO100256 KPN300832 91% 56.3% 10 ECO100256 KPN3002225 100% 65.9% 10 ECO100256 KPN300593 96% 98.8% 10 ECO100256 KPN3002471 99% 100% 10 ECO100256 KPN300875 99% 100% 10 ECO100256 KPN300875 99% 100% 10 ECQ100256 STY104877 99% 100% 10 ECQ100256 STY104877 99% 100% 10 ECQ100256 STY104954 99% 100% 10 EC0100257 EBC103602 100% 10 10 EC0100257 EC0100257 100% 10 10 EC0100257 KPN302325 100% 10 10 EC0100257 KPN306262 100% 10 10	00% 00% 00% 00% 00% 00% 00% 00% 00% 00%
ECO100256 KPN301257 97% 47.9% 10 ECO100256 KPN300832 91% 56.3% 10 ECO100256 KPN300225 100% 65.9% 10 ECO100256 KPN300593 96% 98.8% 10 ECO100256 KPN300357 99% 100% 10 ECO100256 KPN300875 99% 100% 10 ECQ100256 STY100327 99% 100% 10 ECQ100256 STY104877 99% 100% 10 ECQ100256 STY104877 99% 100% 10 ECQ100256 STY104877 99% 100% 10 ECQ100256 STY104954 99% 100% 10 ECQ100257 EBC103602 100% 100% 16 ECQ100257 ECO100257 100% 100% 16 ECQ100257 KPN302325 100% 100% 16 ECQ100257 KPN306262 100% 100% 16 <	00% 00% 00% 00% 00% 00% 00% 00% 00% 00%
ECO100256 KPN300832 91% 56.3% 10 ECO100256 KPN302225 100% 65.9% 10 ECO100256 KPN300593 96% 98.8% 10 ECO100256 KPN3002471 99% 100% 16 ECO100256 KPN300357 99% 100% 16 ECO100256 KPN300875 99% 100% 16 ECQ100256 STY10327 99% 100% 16 ECQ100256 STY104877 99% 100% 16 ECQ100256 STY104954 99% 100% 16 EC0100256 STY104954 99% 100% 16 EC0100257 EBC103602 100% 100% 16 EC0100257 EC0100257 100% 100% 16 EC0100257 EC0100267 100% 100% 16 EC0100257 KPN308692 100% 100% 16 EC0100257 KPN301718 98% 58.2% 89 <	00% 00% 00% 00% 00% 00% 00% 00% 00% 00%
ECO100256 KPN302225 100% 65.9% 10 ECO100256 KPN300593 96% 98.8% 10 ECO100256 KPN300471 99% 100% 16 ECO100256 KPN300357 99% 100% 16 ECO100256 KPN300875 99% 100% 16 ECQ100256 STY100327 99% 100% 16 ECQ100256 STY104877 99% 100% 16 ECQ100256 STY104954 99% 100% 16 ECQ100257 EBC103602 100% 100% 16 ECQ100257 ECO100257 100% 100% 16 ECQ100257 ECO100267 100% 100% 16 ECQ100257 KPN302325 100% 100% 16 ECQ100257 KPN306692 100% 10 16 ECQ100257 KPN301718 98% 58.2% 89 ECQ100257 KPN30173 100% 82.4% 96 </td <td>00% 00% 00% 00% 00% 00% 00% 00% 00% 00%</td>	00% 00% 00% 00% 00% 00% 00% 00% 00% 00%
ECO100256 KPN300593 96% 98.8% 10 ECO100256 KPN302471 99% 100% 16 ECO100256 KPN300357 99% 100% 16 EC0100256 KPN300875 99% 100% 16 ECQ100256 STY100327 99% 100% 16 ECQ100256 STY104877 99% 100% 16 ECQ100256 STY104954 99% 100% 16 ECQ100257 EBC103602 100% 100% 16 ECQ100257 ECO100257 100% 100% 16 ECQ100257 ECO100267 100% 100% 16 ECQ100257 KPN302325 100% 100% 16 ECQ100257 KPN306692 100% 100% 16 ECQ100257 KPN301718 98% 58.2% 89 ECQ100257 KPN301773 100% 82.4% 96 ECQ100257 KPN302468 100% 10 10 </td <td>00% 00% 00% 00% 00% 00% 00% 00% 00% 00%</td>	00% 00% 00% 00% 00% 00% 00% 00% 00% 00%
ECO100256 KPN302471 99% 100% 16 ECO100256 KPN300357 99% 100% 16 EC0100256 KPN300875 99% 100% 16 ECQ100256 STY100327 99% 100% 16 ECQ100256 STY104877 99% 100% 16 ECQ100256 STY104954 99% 100% 16 ECQ100257 EBC103602 100% 100% 16 ECQ100257 ECQ100257 100% 100% 16 ECQ100257 ECQ100267 100% 100% 16 ECQ100257 KPN302325 100% 100% 16 ECQ100257 KPN308692 100% 100% 16 ECQ100257 KPN306262 100% 100% 16 ECQ100257 KPN301718 98% 58.2% 89 ECQ100257 KPN301773 100% 82.4% 96 ECQ100257 KPN300876 100% 10% 16 <	00% 00% 00% 00% 00% 00% 00% 00% 00%
ECO100256 KPN300357 99% 100% 16 EC0100256 KPN300875 99% 100% 16 EC0100256 STY100327 99% 100% 16 EC0100256 STY104877 99% 100% 16 EC0100256 STY104954 99% 100% 16 EC0100257 EBC103602 100% 100% 16 EC0100257 EC0100257 100% 100% 16 EC0100257 EC0100267 100% 100% 16 EC0100257 KPN302325 100% 100% 16 EC0100257 KPN308692 100% 100% 16 EC0100257 KPN306662 100% 100% 16 EC0100257 KPN301718 98% 58.2% 88 EC0100257 KPN301773 100% 82.4% 96 EC0100257 KPN305294 95% 100% 16 EC0100257 KPN300876 100% 10 16 </td <td>00% 00% 00% 00% 00% 00% 00% 00%</td>	00% 00% 00% 00% 00% 00% 00% 00%
EC0100256 KPN300875 99% 100% 10 EC0100256 STY100327 99% 100% 10 EC0100256 STY104877 99% 100% 10 EC0100256 STY104954 99% 100% 10 EC0100257 EBC103602 100% 100% 10 EC0100257 EC0100257 100% 100% 10 EC0100257 EC0100267 100% 100% 10 EC0100257 KPN302325 100% 100% 10 EC0100257 KPN308692 100% 100% 10 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301773 100% 10 10 EC0100257 KPN305294 95% 100% 10 EC0100257 KPN300876 100% 10 10 EC0100257 KPN301600 100% 10 10	00% 00% 00% 00% 00% 00% 00%
ECO100256 STY100327 99% 100% 10 ECO100256 STY104877 99% 100% 10 ECO100256 STY104954 99% 100% 10 ECO100257 EBC103602 100% 100% 10 ECO100257 ECO100257 100% 100% 10 ECO100257 ECO100267 100% 100% 10 ECO100257 KPN302325 100% 100% 10 ECO100257 KPN308692 100% 100% 10 ECO100257 KPN306262 100% 100% 10 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN302468 100% 10 10 EC0100257 KPN30876 100% 10 10 EC0100257 KPN303306 100% 10 10 EC0100257 KPN303306 100% 10 10	00% 00% 00% 00% 00% 00% 00%
EC0100256 STY104877 99% 100% 10 EC0100256 STY104954 99% 100% 10 EC0100257 EBC103602 100% 100% 10 EC0100257 EC0100257 100% 100% 10 EC0100257 EC0100267 100% 100% 10 EC0100257 KPN302325 100% 100% 10 EC0100257 KPN308692 100% 100% 10 EC0100257 KPN301718 98% 58.2% 85 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN302468 100% 10 10 EC0100257 KPN300876 100% 10 10 EC0100257 KPN301600 100% 10 10 EC0100257 KPN303306 100% 10 10 EC0100257 KPN3003306 100% 10 10 EC0100257 KPN3002228 100% 10 10	00% 00% 00% 00% 00% 00%
ECO100256 STY104954 99% 100% 10 ECO100257 EBC103602 100% 100% 10 EC0100257 ECO100257 100% 100% 10 EC0100257 ECO100267 100% 100% 10 EC0100257 KPN302325 100% 100% 10 EC0100257 KPN308692 100% 100% 10 EC0100257 KPN306262 100% 100% 10 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN305294 95% 100% 10 EC0100257 KPN300876 100% 100% 10 EC0100257 KPN301600 100% 10 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN3002228 100% 100% 10 EC0100257 KPN3002228 100% 100% 10	00% 00% 00% 00% 00%
ECO100257 EBC103602 100% 100% 10 EC0100257 ECO100257 100% 100% 10 EC0100257 ECO100267 100% 100% 10 EC0100257 KPN302325 100% 100% 10 EC0100257 KPN308692 100% 100% 10 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN305294 95% 100% 10 EC0100257 KPN300876 100% 10 10 EC0100257 KPN300876 100% 10 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN3002228 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 STY100087 100% 10 10	00% 00% 00% 00%
EC0100257 EC0100257 100% 100% 10 EC0100257 EC0100267 100% 100% 10 EC0100257 KPN302325 100% 100% 10 EC0100257 KPN308692 100% 100% 10 EC0100257 KPN306262 100% 100% 10 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN305294 95% 100% 10 EC0100257 KPN3002468 100% 100% 10 EC0100257 KPN300876 100% 100% 10 EC0100257 KPN301600 100% 100% 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 STY100087 100% 10 10 EC0100257 STY105122 100% 100% 10	00% 00% 00% 00%
ECO100257 ECO100267 100% 100% 10 ECO100257 KPN302325 100% 100% 10 ECQ100257 KPN308692 100% 100% 10 ECQ100257 KPN306262 100% 100% 10 ECQ100257 KPN301718 98% 58.2% 89 ECQ100257 KPN301773 100% 82.4% 90 ECQ100257 KPN305294 95% 100% 10 ECQ100257 KPN300876 100% 100% 10 ECQ100257 KPN301600 100% 100% 10 ECQ100257 KPN303306 100% 100% 10 ECQ100257 KPN3002228 100% 100% 10 ECQ100257 KPN3002228 100% 100% 10 ECQ100257 STY10087 100% 10 10 ECQ100257 STY104783 100% 100% 10 ECQ100257 STY104783 100% 100% 10	00% 00% 00%
EC0100257 KPN302325 100% 100% 10 EC0100257 KPN308692 100% 100% 10 EC0100257 KPN306262 100% 100% 10 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN305294 95% 100% 10 EC0100257 KPN302468 100% 100% 10 EC0100257 KPN300876 100% 100% 10 EC0100257 KPN301600 100% 100% 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN3002228 100% 100% 10 EC0100257 STY10087 100% 10 10 EC0100257 STY105122 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 STY104783 100% 100% 10	00%
ECQ100257 KPN308692 100% 100% 10 ECQ100257 KPN306262 100% 100% 10 ECQ100257 KPN301718 98% 58.2% 89 ECQ100257 KPN301773 100% 82.4% 90 ECQ100257 KPN305294 95% 100% 10 ECQ100257 KPN302468 100% 100% 10 ECQ100257 KPN300876 100% 100% 10 ECQ100257 KPN301600 100% 100% 10 ECQ100257 KPN303306 100% 100% 10 ECQ100257 KPN3002228 100% 100% 10 ECQ100257 STY100087 100% 10 10 ECQ100257 STY105122 100% 100% 10 ECQ100257 STY104783 100% 100% 10 ECQ100257 STY104783 100% 100% 10 ECQ100257 STY104783 100% 100% 10	00%
EC0100257 KPN306262 100% 100% 10 EC0100257 KPN301718 98% 58.2% 89 EC0100257 KPN301773 100% 82.4% 90 EC0100257 KPN305294 95% 100% 10 EC0100257 KPN302468 100% 100% 10 EC0100257 KPN300876 100% 100% 10 EC0100257 KPN301600 100% 100% 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 NGO100079 32% 81.3% 38 EC0100257 STY100087 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 BFR11395 35% 96.3% 98	
EC@100257 KPN301718 98% 58.2% 89 EC@100257 KPN301773 100% 82.4% 90 EC@100257 KPN305294 95% 100% 10 EC@100257 KPN302468 100% 100% 10 EC@100257 KPN300876 100% 100% 10 EC@100257 KPN301600 100% 100% 10 EC@100257 KPN303306 100% 100% 10 EC@100257 KPN302228 100% 100% 10 EC@100257 STY100087 100% 100% 10 EC@100257 STY105122 100% 100% 10 EC@100257 STY104783 100% 100% 10 EC@100257 STY104783 100% 100% 10 EC@100257 STY104783 100% 100% 10 EC@100262 BFR11395 35% 96.3% 98	00%
ECO100257 KPN301773 100% 82.4% 90 EC0100257 KPN305294 95% 100% 10 EC0100257 KPN302468 100% 100% 10 EC0100257 KPN300876 100% 100% 10 EC0100257 KPN301600 100% 100% 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 NGO100079 32% 81.3% 38 EC0100257 STY100087 100% 100% 10 EC0100257 STY105122 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 BFR11395 35% 96.3% 98	
ECQ100257 KPN305294 95% 100% 10 ECQ100257 KPN302468 100% 100% 10 ECQ100257 KPN300876 100% 100% 10 ECQ100257 KPN301600 100% 100% 10 ECQ100257 KPN303306 100% 100% 10 ECQ100257 KPN302228 100% 100% 10 ECQ100257 NGQ100079 32% 81.3% 38 ECQ100257 STY100087 100% 100% 10 ECQ100257 STY105122 100% 100% 10 ECQ100257 STY104783 100% 100% 10 ECQ100257 BFR11395 35% 96.3% 98	9.8%
EC0100257 KPN302468 100% 100% 10 EC0100257 KPN300876 100% 100% 10 EC0100257 KPN301600 100% 100% 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 NG0100079 32% 81.3% 38 EC0100257 STY100087 100% 100% 10 EC0100257 STY105122 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 BFR11395 35% 96.3% 98	0.4%
ECO100257 KPN300876 100% 100% 10 EC0100257 KPN301600 100% 100% 10 EC0100257 KPN303306 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 NG0100079 32% 81.3% 38 EC0100257 STY100087 100% 100% 10 EC0100257 STY105122 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 BFR11395 35% 96.3% 98	00%
EC0100257 KPN301600 100% 100% EC0100257 KPN303306 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 NG0100079 32% 81.3% 38 EC0100257 STY100087 100% 100% 10 EC0100257 STY105122 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100262 BFR11395 35% 96.3% 98	00%
EC0100257 KPN303306 100% 100% 10 EC0100257 KPN302228 100% 100% 10 EC0100257 NG0100079 32% 81.3% 38 EC0100257 STY100087 100% 100% 10 EC0100257 STY105122 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100257 STY104783 100% 96.3% 98	
ECO100257 KPN302228 100% 100% 10 EC0100257 NG0100079 32% 81.3% 38 EC0100257 STY100087 100% 100% 10 EC0100257 STY105122 100% 100% 10 EC0100257 STY104783 100% 100% 10 EC0100262 BFR11395 35% 96.3% 98	00%
ECQ100257 NGO100079 32% 81.3% 38 ECQ100257 STY100087 100% 100% 10 ECQ100257 STY105122 100% 100% 10 ECQ100257 STY104783 100% 100% 10 ECQ100262 BFR11395 35% 96.3% 98	00%
ECQ100257 STY100087 100% 100% 10 ECQ100257 STY105122 100% 100% 10 ECQ100257 STY104783 100% 100% 10 ECQ100262 BFR11395 35% 96.3% 98	00%
ECO100257 STY105122 100% 100% ECO100257 STY104783 100% 100% 10 ECO100262 BFR11395 35% 96.3% 98	3.4%
EC@100257 STY104783 100% 100% 10 EC@100262 BFR11395 35% 96.3% 98	00%
ECO100262 BFR11395 35% 96.3% 98	00%
	00%
EC0100262 EBC102026 000/ 1000/ 1/	3.5%
ECO100262 EBC102936 98% 100% 100%	00%
ECO100262 ECO100262 100% 100% 10	00%
ECO100262 SPN401706 27% 21.1% 25	5.4%
	00%
	9.6%
	9.6%
	1.3%
	8.3%
	8.3%
	5.9%
	2.7%
	2.9%
<u>`</u>	
	00%
	00% 8.8%
	00% 8.8% 1.5%
	00% 8.8% 1.5% 1.5%
	00% 8.8% 1.5% 1.5%
	00% 8.8% 1.5% 1.5% 00%
ECO100315 BCE100919 27% 28.8% 3 ECO100315 EBC101762 85% 99.4% 90	00% 8.8% 1.5% 1.5%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100315	ECO100315	100%	100%	100%
ECO100350	ECO100350	100%	100%	100%
ECO100361	ABA100700	46%	97.0%	95.2%
ECO100361	BAN101055	43%	93.7%	97.5%
ECO100361	BAN100517	51%	93.1%	95.1%
ECO100361	BPT100922	45%	93.7%	94.7%
ECO100361	BCE101370	45%	93.7%	96.4%
ECO100361	BFU101599	44%	94.9%	97.0%
ECO100361	BMA104829	46%	93.7%	96.4%
ECO100361	CJU100923	51%	94.3%	98.2%
ECO100361	CPN200001	45%	92.8%	94.6%
ECO100361	CTR200001	43%	93.4%	94.9%
ECO100361	CAC102676	49%	94.3%	99.1%
ECO100361	CBO101832	48%	93.4%	96.9%
EC0100361	CDF102168	49%	94.6%	98.5%
EC0100361	CDP100775	49%	94.9%	98.8%
EC0100361	EBC102698	93%	66.9%	100%
EC0100361	ECO100361	100%	100%	100%
EC0100361	HPY100160	51%	94.0%	98.1%
ECO100361	KPN308372	91%	96.7%	100%
ECO100361 ECO100361	LPN101016	50%	93.4%	95.2%
EC0100361 EC0100361	LMO100837	51%	95.2%	98.8%
EC0100361	MCA101135	46%	93.1%	95.2%
EC0100361	MAV107884	48%	93.4%	97.2%
	MBV102362	47%	93.4%	96.9%
EC0100361	MLP101436	46%	93.1%	96.0%
EC0100361	MTU2005.10	47%	93.4%	96.4%
ECO100361 ECO100361	NGO100861	43%	93.4%	94.1%
EC0100361 EC0100361	NME200933	44%	93.4%	94.1%
ECO100361	PMU101692	41%	93.7%	94.1%
ECO100361 ECO100361	PRT102370	77%	95.2%	98.2%
ECO100361 ECO100361	PAE205238	40%	93.7%	94.7%
ECO100361 ECO100361	PPU110651	76%	94.3%	97.5%
	PSY101277	42%	94.0%	95.2%
ECO100361		90%	85.4%	99.6%
ECO100361	SPA101546		96.7%	100%
ECO100361	STY104591	93%	92.8%	96.9%
ECO100361	SAU801668	49%		96.9%
ECO100361	SEP201642	49%	92.8%	98.0%
ECO100361	SHA101765	44%	93.7%	92.2%
ECO100361	VCH100105	43%	93.7%	94.1%
ECO100361	YPS000599		100%	100%
ECO100362	ECO100362	100%		57.0%
ECO100366	BFR101178	24%	34.9%	36.6%
ECO100366	CJU100896	19%	55.0%	9.1%
ECO100366	CDP102949	27%	21.6%	
ECO100366	EBC102756	70%	96.6%	100%
ECO100366	ECO100366	100%	100%	
ECO100366	LPN101403	23%	25.9%	39.1%
ECO100366	PRT103239	21%	51.8%	36.1%
ECO100366	SPA101548	89%	70.7%	100%
ECO100366	STY104592	89%	97.0%	47.2%
ECO100366	STM104306	91%	100%	47.8%
ECO100367	EBC102015	28%	77.0%	100%
ECO100367	EBC102758	51%	91.0%	97.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100367	ECO100367	100%	100%	100%
ECO100367	KPN304631	34%	78.8%	100%
ECO100367	SPA101549	68%	98.6%	100%
ECO100367	STY104593	71%	93.2%	100%
ECO100367	STM104307	71%	93.2%	100%
ECO100381	EBC102823	83%	96.8%	96.8%
ECO100381	ECO100381	100%	100%	100%
ECO100381	KPN304881	79%	98.4%	98.4%
ECO100381	STY100328	95%	98.4%	98.4%
ECO100381	STM104352	93%	98.4%	98.4%
ECO100390	ABA100709	34%	73.5%	72.5%
ECO100390	BAN111886	25%	64.5%	73.0%
ECO100390	BAN113193	23%	98.5%	97.9%
ECO100390	BFR11820	28%	96%	99.2%
ECO100390	BPT100403	35%	21.2%	23.5%
ECO100390	BBU100828	26%	82.8%	82.6%
ECO100390	BCE105254	23%	22.8%	24.4%
ECO100390	BFU106002	34%	21.5%	23.4%
ECO100390	CAC100402	26%	84%	85.3%
ECO100390	CBO100412	26%	92.2%	92.2%
ECO100390	CDF103755	25%	89.5%	92.6%
ECO100390	CDP101084	24%	62%	58.7%
EC0100390	EBC101912	81%	99.8%	98.3%
EC0100390	EFA200864	26%	97.2%	97.9%
EC0100390	EFM200128	24%	96%	99.5%
EC0100390	ECO100390	100%	100%	100%
ECO100390	KPN308651	78%	99.8%	99.5%
ECO100390	LMO102080	27%	96.8%	97.6%
EC0100390 EC0100390	MCA101153	32%	95.8%	90.7%
EC0100390	MAV100736	24%	62%	58.2%
EC0100390	MLP100687	27%	21.2%	23.0%
ECO100390	MTU406882	27%	21.2%	30.2%
ECO100390	PRT101271	55%	96.8%	96.3%
EC0100390 EC0100390	PAE204279	31%	92%	91.4%
ECQ100390 ECQ100390	PPU105701	33%	92%	92.2%
J	PSY101474		 	
ECO100390 ECO100390	SPA101178	31% 81%	99.8%	99.5%
EC0100390 EC0100390	STY100355	83%	100%	100%
ECO100390 ECO100390	SAU801345	23%	97.8%	98.9%
EC0100390	SEP202011	21%	97.8%	98.9%
EC0100390 EC0100390	SHA100866	23%	72.2%	<u> </u>
EC0100390 EC0100390	SPN201925	26%		73.8%
			16%	16.3%
ECO100390	TPA100619	26%	63.2%	62.9%
ECO100390	VCH103245	28%	72.8%	74.4%
ECO100390	YPS002608	60%	98.8%	96.9%
ECO100394	ABA104913	59%	99.6%	97.2%
ECO100394	BAN112358	49%	94.7%	95.8%
ECO100394	BAN100163	52%	98.2%	97.6%
EC0100394	BCE101232	61%	94.7%	100%
ECO100394	BMA101593	62%	95.2%	96.0%
ECO100394	EBC101456	91%	54.9%	100%
ECO100394	EFA201477	33%		98%
ECO100394	ECO100394	100%	100%	100%
ECO100394	KPN304910	93%	100%	100%

V O 02/07/103		1 - 4		T-17-0302/07107
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100394	MPN100528	22%	71.8%	65.7%
ECO100394	PRT102253	60%	96.9%	97.6%
ECO100394	PAE205092	63%	95.6%	94.2%
ECO100394	PPU106756	60%	93.2%	95.3%
ECO100394	PSY101310	63%	96.9%	97.2%
ECO100394	SPA101112	94%	98.0%	99.6%
ECO100394	STY100389	95%	99.6%	99.8%
ECO100394	STM100031	95%	99.6%	99.8%
ECO100394	YPS002596	81%	98.7%	97.4%
ECO100395	BAN101050	31%	73.1%	70.0%
ECO100395	BAN109230	33%	73.1%	69.8%
EC0100395	BFR12473	26%	64.0%	70.0%
ECO100395	CAC100478	27%	64.1%	82.9%
ECO100395	CDF104139	31%	74.4%	71.2%
ECO100395	EBC101457	84%	79.0%	100%
ECO100395	EFA202423	30%	68.6%	65.8%
ECO100395	EFM200019	29%	82.5%	82.5%
ECQ100395	ECO100395	100%	100%	100%
ECO100395	KPN304911	79%	99.5%	99.5%
ECO100395	LMO100614	31%	73.2%	70.7%
ECO100395	SPA105253	92%	4.5%	90%
ECO100395	SPA101113	81%	44.1%	100%
ECO100395	STY100390	83%	99.8%	99.8%
ECO100395	STM100032	83%	99.8%	99.8%
ECO100395	SPN400948	29%	72.9%	70.0%
ECO100395	SPY201005	32%	75.0%	73.0%
ECO100395	YPS002575	57%	99.5%	99.0%
ECO100402	BAN107351	47%	26.1%	35.6%
ECO100402	BFR102271	29%	60.9%	24.5%
ECO100402	EBC103463	93%	100%	100%
ECO100402	ECO100402	100%	100%	100%
ECQ100402	KPN301340	90%	100%	97.5%
ECO100402	PRT101447	89%	100%	100%
EC0100402	PPU108585	56%	88.7%	79.7%
ECO100402	PSY105486	56%	88.7%	79.0%
EC0100402	SPA103227	96%	100%	100%
EC0100402	STY100420	96%	100%	100%
ECO100402	STM100071	96%	100%	100%
EC0100402 EC0100402	YPS000205	82%	98.3%	100%
EC0100402	EBC101277	64%	58.8%	100%
ECO100404 ECO100404	ECO100404	100%	100%	100%
ECO100404 ECO100404	KPN303448	70%	88.4%	97.8%
EC0100404 EC0100404	SPA103216	73%	89.9%	100%
ECO100404 ECO100404	STY100423	74%	89.9%	100%
EC0100404 EC0100407	ABA103638	62%	91.7%	91.0%
ECO100407	BAN110020	44%	96.2%	100%
	BAN104354	54%	96.2%	97.4%
ECO100407 ECO100407	BFR104554	42%	88.5%	83.5%
	_ 			
ECO100407	BPT100012	39%	94.9%	85.5%
ECO100407	BCE102848	40%	96.2%	84.8%
ECO100407	BFU108808	42%	96.8%	86.9%
ECO100407	BMA102272	41%	93.6%	81.5%
ECO100407	CJU100351	50%	98.7%	100%
ECO100407	CPN200977	27%	98.7%	100%

563

WO 02/077183 PCT/US02/09107

Ouery LocusID Homolog LocusID Identity Ouery Coverage Homolog Coverage

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100407	CTR200105	37%	99.4%	98.7%
ECO100407	CAC100789	52%	98.7%	98.7%
ECO100407	CBO101079	57%	98.7%	99.4%
ECO100407	CDF101258	55%	97.4%	95.6%
ECO100407	CDP100290	42%	94.2%	92.3%
ECO100407	EBC101280	98%	100%	100%
ECO100407	ECO100407	100%	100%	100%
ECO100407	HIN101269	76%	100%	90.2%
ECO100407	HPY100002	50%	99.4%	99.4%
ECO100407	KPN308524	100%	100%	87.2%
ECO100407	LPN100108	43%	90.4%	90.3%
ECO100407	MCA103693	60%	90.4%	85.4%
ECO100407	MAV100814	44%	91.7%	85.9%
ECO100407	MBV102145	44%	91.7%	87.5%
ECO100407	MLP100346	42%	90.4%	88.8%
ECO100407	MTU201397	44%	91.7%	90.9%
EC0100407	NGO100984	45%	96.8%	94.3%
EC0100407	NME200821	44%	96.8%	94.3%
EC0100407	PMU100731	73%	100%	99.4%
EC0100407 EC0100407	PRT100213	83%	99.4%	99.4%
EC0100407	PAE204050	56%	100%	98.1%
EC0100407	PPU104481	57%	100%	98.1%
EC0100407	PSY108754	52%	100%	98.1%
	SPA108738	90%	100%	90.2%
ECO100407	STY100427	91%	100%	100%
ECO100407	STM100098	91%	100%	100%
ECO100407	SAU801767	58%	82.7%	96.2%
ECO100407		56%	96.2%	97.4%
ECO100407	SEP202131	58%	94.9%	96.7%
ECO100407	SHA101039	54%	100%	100%
ECO100407	SPN400161		98.7%	89.0%
ECO100407	VCH102234	65% 86%	99.4%	99.4%
ECO100407	YPS002509	44%	97.8%	91.3%
ECO100408	ABA101072	32%	87.8%	93.1%
ECO100408	BAN105057	35%	87.8%	93.1%
ECO100408	BAN110216		62.6%	28.6%
ECO100408	BFR105998	27%		-
ECO100408	BPT100014	45%	95.0%	88.3%
ECO100408	BBU100107	33%	85.6%	86.2%
ECO100408	BCE111817	43%	97.8%	93.8%
ECO100408	BFU113008	42%	97.1%	93.8%
ECO100408	BMA102557	44%	97.8%	93.8%
ECO100408	CJU100350	34%	89.9%	93.9%
ECO100408	CPN200850	23%	91.4%	78.5%
ECO100408	CTR200214	25%	90.6%	79.3%
ECO100408	CAC103566	31%	87.8%	91.1%
ECO100408	CBO100362	33%	89.2%	97.2%
ECO100408	CDF101805	31%	66.9%	55.6%
ECO100408	CDP100352	32%	91.4%	66.8%
ECO100408	EBC101281	93%	100%	100%
ECO100408	EFA202204	34%	87.8%	81.5%
ECO100408	EFM100580	31%	90.6%	91.3%
ECO100408	ECO100408	100%	100%	100%
ECO100408	HIN101270	54%	95.7%	92.4%
ECO100408	HPY100001	30%	89.9%	90.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100408	KPN308025	94%	100%	100%
ECO100408	LPN101606	40%	93.5%	88.4%
ECO100408	LMO102626	37%	91.4%	96.1%
ECO100408	MCA103036	34%	94.2%	82.3%
ECO100408	MAV101907	36%	87.8%	80.8%
ECO100408	MBV101339	34%	87.8%	43.4%
ECO100408	MLP100320	35%	89.2%	67.4%
ECO100408	MTU202496	34%	87.8%	80.8%
ECO100408	NGO100982	42%	96.4%	95.0%
ECO100408	NME200820	42%	96.4%	95.0%
ECO100408	PMU100730	63%	95.7%	92.4%
ECO100408	PRT103311	74%	74.8%	100%
ECO100408	PAE204049	55%	96.4%	84.3%
ECO100408	PPU111159	53%	96.4%	80.7%
ECO100408	PSY102195	51%	96.4%	81.2%
ECO100408	SPA103662	94%	40.3%	100%
ECO100408	STY100428	96%	100%	100%
ECO100408	STM100099	96%	100%	100%
ECO100408 ECO100408	SAU801524	34%	88.5%	95.3%
ECO100408	SEP200894	35%	88.5%	95.3%
ECO100408	SHA100990	34%	88.5%	96.1%
ECO100408	SMU101206	31%	89.9%	90.2%
ECO100408	SPN400390	34%	89.9%	87.0%
ECO100408	SPY201398	30%	89.9%	88%
ECO100408 ECO100408		35%	90.6%	91.5%
	TPA101005	28%	54.0%	59.8%
ECO100408	UUR100302			95.5%
ECO100408	VCH102233	53%	97.1%	
ECO100408 ECO100409	YPS002505	84% 46%	99.3%	100%
	ABA105144		98.2%	99.3%
ECO100409	BFR11172 BPT100016	30%	97.5%	95.9%
ECO100409	BCE110120	43%	98.2%	93.8%
ECO100409	<u> </u>	53%	52%	85%
ECO100409	BFU102731	49%	97.8%	97.3%
ECO100409	BMA107273	44%	96.9%	99.1%
ECO100409	CJU101376	27%	82.5%	88.6%
ECO100409	CDP100279	31%	74.8%	72.3%
ECO100409	EBC101282	84%	99.4%	100%
ECO100409	ECO100409	100%	100%	100%
ECO100409	HIN101271	52%	99.1%	93.9%
ECO100409	KPN303432	84%	99.4%	100%
ECO100409	LPN101227	52%	82.2%	83.3%
ECO100409	MCA103652	39%	91.7%	99.7%
ECO100409	MAV101439	35%	82.8%	82.4%
ECO100409	MBV102049	36%	82.8%	81.4%
ECO100409	MLP101022	35%	81.8%	82.5%
ECO100409	MTU202939	36%	82.8%	81.4%
ECO100409	NGO100695	42%	97.8%	99.1%
ECO100409	NME201944	43%	97.8%	99.1%
ECO100409	PMU100729	53%	99.1%	99.7%
ECO100409	PRT100038	67%	99.1%	98.8%
ECO100409	PAE204048	45%	98.8%	98.8%
ECO100409	PPU104483	45%	98.2%	98.1%
ECO100409	PSY102181	47%	99.1%	99.4%
ECO100409	SPA103660	87%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100409	STY100439	87%	100%	100%
ECO100409	STM100100	88%	100%	100%
ECO100409	VCH102232	54%	99.1%	96.1%
ECO100409	YPS002502	75%	99.7%	98.5%
EC0100424	ABA103655	43%	93.7%	96.9%
ECO100424	BAN111570	28%	72.4%	88.2%
ECO100424	BAN110867	33%	85.1%	92.4%
EC0100424	BPT102774	55%	85.7%	88.8%
ECO100424	BCE104834	59%	78.1%	93.5%
ECO100424	BFU101934	57%	83.2%	93.5%
ECO100424	BMA107732	57%	88.6%	92.6%
EC0100424	BMA109512	56%	89.5%	97.2%
EC0100424	CDP100360	28%	24.8%	21.0%
EC0100424	EBC101217	95%	100%	100%
EC0100424	ECO100424	100%	100%	100%
EC0100424	KPN303418	85%	47.9%	100%
ECO100424	LMO100640	34%	94.0%	81.0%
ECO100424 ECO100424	MAV102952	26%	39.0%	37.5%
EC0100424 EC0100424	MBV101465	22%	42.9%	27.2%
		22%	42.9%	25%
EC0100424	MTU202140		98.4%	98.4%
EC0100424	PRT103954	67%	95.2%	
EC0100424	PAE201316	57%		90.0%
EC0100424	PPU101498	57%	97.5%	99.7%
EC0100424	PSY104255	56%	96.5%	96.5%
ECO100424	SPA102308	76%	100%	100%
ECO100424	STY100721	95%	100%	99.1%
ECO100424	SAU801061	35%	81.0%	68.0%
ECO100424	SEP200354	38%		66.6%
ECQ100424	SHA100551	40%	58.4%	59.5%
ECO100424	YPS001897	66%	96.5%	99.7%
ECO100430	ABA101466	71%	93.6%	91.3%
ECQ100430	BAN100418	59%	22.6%	96.9%
ECO100430	BAN109620	38%	94.3%	97.8%
ECO100430	BAN107278	65%	68.2%	93.4%
EC0100430	BAN111361	61%	96.5%	96.4%
ECO100430	BFR100135	54%	86.1%	94.8%
ECO100430	BPT100486	71%	100%	93.2%
ECO100430	BBU100611	53%	96.7%	95.8%
ECO100430	BCE114986	74%	97.4%	97.6%
ECO100430	BFU100995	73%	97.4%	97.6%
ECO100430	BMA101609	73%	97.4%	97.6%
ECO100430	CJU100247	55%	94.6%	96.2%
ECO100430	CPN201004	57%	96.0%	98.3%
ECO100430	CTR200078	57%	96.0%	98.3%
ECO100430	CAC101555	61%	96.9%	94.7%
ECO100430	CBO100837	62%	97.4%	93.7%
ECO100430	CDF102979	61%	96.5%	97.8%
ECO100430	CDP101237	61%	96.2%	96.7%
ECO100430	EBC101545	95%	98.3%	100%
ECO100430	EFA202273	60%	95.5%	96.6%
ECO100430	EFM101238	60%	96.5%	97.6%
ECO100430	ECO100430	100%	100%	100%
ECO100430	HIN100694	69%	97.4%	100%
ECO100430	HPY101354	51%	94.3%	97.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100430	KPN301083	98%	100%	100%
ECO100430	LMO102362	62%	96.2%	96.2%
ECO100430	MCA101655	65%	93.4%	97.0%
ECO100430	MAV102304	62%	96.0%	96.0%
ECO100430	MBV101048	61%	96.9%	96.9%
ECO100430	MLP100910	61%	96.2%	96.2%
ECO100430	MTU202421	61%	96.9%	96.9%
ECO100430	NGO101085	69%	94.1%	97.8%
ECO100430	NME201444	69%	94.1%	97.8%
ECO100430	PMU101977	73%	94.6%	98.1%
ECO100430	PRT101501	88%	100%	100%
ECO100430	PAE201801	77%	98.3%	97.9%
ECO100430	PPU109917	77%	98.8%	98.4%
ECO100430	PSY107890	77%	98.3%	97.9%
ECO100430	SPA102998	97%	98.8%	99.8%
ECO100430	STY100725	97%	100%	100%
ECO100430	STM100438	98%	100%	100%
ECO100430	SAU801674	61%	94.1%	94.0%
ECO100430	SEP201649	61%	94.1%	94.0%
ECO100430	SHA100379	56%	44.8%	92.5%
EC0100430	SMU100958	59%	94.1%	96.6%
EC0100430	SPN401426	58%	96.7%	98.8%
ECO100430	SPY200660	59%	94.1%	96.8%
ECO100430	TPA100504	56%	93.6%	95.4%
EC0100430	VCH101891	84%	100%	100%
EC0100430	YPS001881	92%	100%	100%
ECO100431	ABA100033	61%	24.2%	90.3%
ECO100431	ABA105304	55%	97.6%	95.2%
ECO100431	BAN104528	44%	96.9%	99.6%
EC0100431	BAN103992	53%	97.7%	96.3%
ECO100431	BFR11925	45%	97.4%	94.3%
ECO100431	BPT100489	68%	98.2%	95.5%
ECO100431	BBU100612	39%	97.7%	97.3%
EC0100431	BCE108504	69%	98.2%	95.3%
ECO100431	BFU100993	70%	98.5%	95.5%
ECO100431	BMA107557	69%	99.4%	96.6%
ECO100431	CJU100999	39%	97.1%	98.4%
ECO100431	CPN200737	40%	97.8%	95.1%
ECO100431	CTR200613	40%	97.1%	94.6%
ECO100431	CAC100342	47%	97.1%	98.1%
ECO100431	CBO101096	50%	98.0%	99.6%
ECO100431	CDF102998	52%	97.2%	97.3%
ECO100431	EBC101544	98%	54.5%	100%
EC0100431	ECO100431	100%	100%	100%
ECO100431	HIN100442	74%	98.3%	96.3%
ECO100431	HPY101359	39%	97.1%	98.9%
ECO100431	KPN301084	96%	62.6%	100%
ECO100431	MCA100771	52%	98.9%	96.8%
ECO100431	MAV107390	50%	47.6%	95.6%
ECO100431	MLP100403	40%	8.2%	19.4%
ECO100431	MGE100244	41%	96.2%	98.2%
ECO100431	MPN100504	40%	96.2%	98.2%
ECO100431	NGO100249	65%	98.1%	95.5%
ECO100431	NME201277	65%	98.9%	97.0%
ECO100431 ECO100431	MPN100504 NGO100249	40% 65%	96.2% 98.1%	98.2% 95.5%

OTTD	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
Query LocusID	PMU101978	75%	99.4%	96.8%
ECO100431 ECO100431	PRT101500	88%	100%	100%
ECO100431 ECO100431	PAE201802	70%	97.8%	96.0%
ECO100431	PPU106533	70%	97.8%	96.0%
ECO100431	PSY103927	69%	97.8%	96.0%
ECO100431	SPA102997	99%	100%	98.4%
ECO100431	STY100726	99%	100%	100%
EC0100431	STM100720	99%	100%	100%
ECO100431	SPN401780	25%	15.9%	41.4%
ECO100431	SPY101613	24%	13.8%	42.9%
ECO100431	TPA100519	43%	98.3%	87.7%
EC0100431	UUR100350	40%	96.7%	99.0%
EC0100431	VCH101890	82%	100%	99.6%
EC0100431	YPS001875	91%	100%	100%
EC0100431 EC0100435	ABA106138	24%	96.2%	84.2%
ECO100435	BFR102134	27%	79.5%	78.4%
ECO100435	BFU104105	26%	95.5%	83.9%
ECO100435	CAC102936	39%	55.3%	54.1%
ECO100435	EBC102273	87%	99.2%	99.2%
ECO100435	EC0100435	100%	100%	100%
ECO100435	KPN302385	85%	98.5%	97.7%
ECO100435	LPN102857	30%	85.6%	83.1%
ECO100435	MCA100454	24%	78.8%	64.6%
ECO100435	MAV107513	22%	97.0%	94.2%
ECO100435	MBV101527	26%	96.2%	92.8%
ECO100435	MTU202439	26%	96.2%	92.8%
ECO100435	NGO101290	40%	96.2%	97.6%
ECO100435	NME200457	40%	96.2%	97.6%
ECO100435	PRT106164	55%	97.0%	94.8%
ECO100435	SPA102993	93%	100%	100%
ECO100435	STY100750	94%	100%	100%
ECO100435	STM100730	94%	100%	100%
ECO100435	SPN401264	26%	75.8%	33.1%
ECO100435	TPA100154	37%	90.2%	88.8%
ECO100435	YPS001867	69%	99.2%	97.0%
ECO100435	BAN103966	24%	61.1%	4.8%
ECO100445	BAN105784	24%	61.1%	43.0%
ECO100445	BMA103371	31%	43.7%	23.7%
ECO100445	CJU101094	30%	44.2%	93.3%
ECO100445	EBC101949	75%	81.6%	98.1%
ECO100445	ECO100445	100%	100%	100%
ECO100445 ECO100445	KPN302393	70%	84.2%	98.8%
ECO100445	MAV100663	25%	55.3%	53.0%
ECO100445	PAE203672	38%	54.2%	77.3%
ECO100445	PPU105141	40%	52.1%	74.2%
ECO100445	PSY107733	35%	53.2%	98.1%
ECO100445	SPA103161	84%	100%	100%
ECO100445	STY100781	88%	100%	100%
ECO100445	STM100781	88%	100%	100%
ECO100445	VCH1010473	43%	47.9%	63.6%
ECO100445	YPS001806	55%	87.4%	94.2%
ECO100443 ECO100448	ECO100448	100%	100%	100%
ECO100448	KPN302401	62%	48.5%	100%
EC0100448	PAE202198	27%	94.8%	95.1%
LCQ100448	1 ALL/20/2170	4//0	77.070	/ /3.1/0

70 02/01/103	1 = 1 = 1	T 7 1 12		TET/0502/05107
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100448	PPU101997	30%	97.1%	93.8%
ECO100448	SPA103158	77%	49.2%	100%
ECO100448	STY100783	67%	99.2%	99.6%
ECO100453	ABA101792	57%	99.1%	99.3%
ECO100453	BPT100257	67%	98.8%	97.6%
ECO100453	BCE114545	66%	24.5%	84.0%
ECO100453	BCE104032	66%	99.5%	98.6%
ECO100453	BFU105569	65%	100%	98.2%
ECO100453	BMA106830	66%	99.9%	98.2%
ECO100453	EBC103991	92%	100%	100%
ECO100453	ECO100453	100%	100%	100%
ECO100453	HIN100875	32%	97.9%	97.4%
ECO100453	KPN303893	91%	100%	100%
ECO100453	LPN101626	40%	98.9%	99.4%
ECO100453	MCA100461	56%	99.9%	99.7%
ECO100453	MAV103904	24%	18.5%	20.4%
ECO100453	MBV105073	23%	19.9%	19.1%
ECO100453	MTU201501	23%	19.5%	16.7%
ECO100453	NGO100607	48%	99.9%	98.7%
ECO100453	NME201818	49%	99.9%	98.7%
ECO100453	PMU101132	31%	97.6%	97.1%
ECO100453	PRT104879	75%	99.3%	99.2%
ECO100453	PAE200425	70%	98.5%	98.6%
ECO100453	PPU101135	65%	99.0%	98.7%
ECO100453	PSY103933	65%	99.3%	99.5%
ECO100453	STY100789	94%	99.9%	99.9%
ECO100453	YPS001789	84%	99.8%	99.6%
ECO100456	BCE114237	32%	23.7%	57.2%
ECO100456	BFU101219	28%	27.1%	67.2%
ECO100456	CPN200570	19%	22.7%	58.7%
ECO100456	CTR100201	19%	37.5%	48.0%
ECO100456	CDP102443	27%	12.8%	29.9%
ECO100456	EBC103983	84%	97.2%	99.9%
ECO100456	ECO100456	100%	100%	100%
ECO100456	HIN100185	35%	97.2%	98.4%
ECO100456	KPN300148	83%	14.6%	100%
ECO100456	KPN303886	83%	99.7%	97.9%
ECO100456	LPN100506	21%	82.6%	90.8%
ECO100456	MLP100103	19%	19.0%	26.4%
ECO100456	MPN100367	22%	38.7%	9.5%
ECO100456	PMU100358	38%	97.7%	98.5%
ECO100456	PRT105555	48%	97.3%	98.3%
ECO100456	PAE205017	39%	97.1%	97.0%
ECO100456	PPU102036	40%	97.4%	98.5%
ECO100456	PSY103682	41%	94.7%	93.7%
ECO100456	SPA102914	88%	95.2%	100%
ECO100456	STY100812	89%	99.8%	99.8%
ECO100456	STM100504	89%	99.7%	99.7%
ECO100456	UUR100392	24%	13.8%	11.3%
1500100430	00100332		97.4%	96.3%
ECO100456	VPS001764	1 74%		1 - 2 1 2 2 7 1 1
ECO100456	YPS001764 EBC106191	59%		
ECO100457	EBC106191	73%	84.9%	73.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100457	SPA102916	80%	92.5%	92.7%
ECO100457	STY100814	80%	92.5%	92.7%
ECO100457	VCH101828	58%	81.1%	61.4%
ECO100457	YPS003930	57%	84.9%	88.2%
ECO100458	CDP100984	27%	56%	24.8%
ECO100458	EBC103989	56%	100%	100%
ECO100458	ECO100458	100%	100%	100%
ECO100458	KPN300488	55%	92%	100%
ECO100458	KPN303892	59%	100%	100%
ECO100458	PMU100990	20%	97.1%	95.1%
ECO100458	PRT104644	35%	98.3%	97.2%
ECO100458	PAE108407	28%	88.6%	23.8%
ECO100458	SPA102917	72%	97.7%	100%
ECO100458	VCH101827	32%	81.1%	79.1%
ECO100458	YPS001761	36%	98.3%	97.2%
ECO100464	ABA105152	52%	99.7%	99.4%
ECO100464	BFR105086	32%	90.2%	82.4%
ECO100464	BPT101320	59%	99.2%	98.1%
ECO100464	BBU100559	41%	98.4%	93.4%
ECO100464	BCE101760	60%	99.4%	99.1%
ECO100464	BFU107645	61%	99.5%	98.9%
ECO100464	BMA108677	61%	98.7%	99.2%
ECO100464	CJU100481	43%	98.4%	98.8%
EC0100464	CAC1010481	39%	98.4%	99.0%
EC0100464	CBO103036	41%		
EC0100464	CDF102736	29%	42.6%	99.6%
ECO100464			96.0%	95.7%
EC0100464	EBC103981 ECO100464	91%	100%	100%
ECO100464	HIN100103	75%	100%	100%
ECO100464	HPY100206	45%	99.5%	98.7%
ECO100464	KPN303864		98.6%	98.4%
ECO100464	LPN102583	91%	100%	100%
		62%	99.5%	99.2%
ECO100464	LMO102556	23%	98.6%	98.2%
ECO100464	MCA100562	50%	98.6%	98.6%
ECO100464	MAV101501	48%	97.1%	96.7%
ECO100464	MBV105727	45%	98.4%	98.0%
ECO100464	MLP100990	45%	98.4%	98.0%
ECO100464	MTU202265	45%	98.4%	98.0%
ECO100464	NGO100474	25%	19.9%	34.3%
ECO100464	NME200399	25%	19.9%	18.6%
ECO100464	PMU101024	76%	99.2%	98.4%
ECO100464	PRT105522	81%	99.7%	99.0%
ECO100464	PAE201595	61%	99.4%	98.4%
ECO100464	PPU101233	60%	99.4%	98.7%
ECO100464	PSY105027	60%	99.4%	98.7%
ECO100464	SPA100495	91%	91.7%	99.7%
ECO100464	STY100841	94%	100%	98.7%
ECO100464	STM100533	94%	100%	98.7%
ECO100464	TPA100974	41%	98.4%	98.7%
ECO100464	VCH100968	69%	99.2%	98.1%
ECO100464	YPS001737	86%	100%	99.7%
ECO100465	ABA102578	62%	99.5%	99.1%
ECO100465	BAN108855	43%	100%	98.6%
ECO100465	BAN106781	47%	100%	98.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100465	BFR10586	39%	98.6%	96.8%
ECO100465	BPT101280	60%	99.5%	99.1%
ECO100465	BBU100416	35%	99.5%	98.1%
ECO100465	BCE114693	65%	96.3%	96.4%
ECO100465	BFU106856	65%	96.3%	96.4%
ECO100465	BMA102106	65%	96.7%	96.8%
ECO100465	CJU100600	25%	98.1%	94.3%
ECO100465	CPN200508	34%	83.6%	83.6%
ECO100465	CTR200398	32%	94.9%	83.0%
ECO100465	CAC102891	48%	100%	99.1%
ECO100465	CBO103787	51%	100%	98.6%
ECO100465	CDF102350	52%	100%	96.4%
ECO100465	CDP100003	40%	86.4%	87.3%
ECO100465	EBC103984	96%	100%	100%
ECO100465	EFA201978	45%	99.5%	98.6%
ECO100465	EFM200623	45%	99.5%	99.1%
ECO100465	ECO100465	100%	100%	100%
ECO100465	HIN100331	71%	100%	100%
ECO100465	HPY100611	30%	61.2%	72.3%
ECO100465	KPN303865	96%	100%	100%
ECO100465	LPN102084	55%	99.5%	99.1%
ECO100465	LMO102187	46%	99.5%	98.6%
ECO100465	MCA101231	61%	99.5%	98.6%
ECO100465	MAV102071	38%	100%	99.4%
ECO100465	MBV101628	37%	100%	99.4%
ECO100465	MLP101114	39%	86.4%	87.3%
ECO100465	MTU200730	37%	100%	99.4%
ECO100465	MGE100174	34%	84.6%	84.6%
ECO100465	MPN100646	32%	86.0%	86.5%
ECO100465	NGO100911	62%	100%	99.5%
ECO100465	NME200954	64%	100%	99.5%
ECO100465	PMU100284	71%	99.5%	99.5%
ECO100465	PRT104973	81%	100%	100%
ECO100465	PAE203684	64%	96.7%	96.7%
ECO100465	PPU107935	64%	96.7%	96.8%
ECO100465	PSY104919	60%	81.3%	96.2%
ECO100465	SPA100230	92%	100%	91.8%
ECO100465	STY100842	96%	100%	100%
ECO100465	STM100555	96%	100%	100%
ECO100465	SAU802229	47%	99.5%	98.6%
ECO100465	SEP200243	47%	99.5%	98.6%
ECO100465	SHA100179	47%	99.5%	98.1%
ECQ100465	SMU100597	43%	85.0%	85.8%
ECO100465	SPN400210	38%	99.5%	98.1%
ECO100465	SPY200058	40%	99.5%	98.1%
ECO100465	TPA100588	38%	98.6%	97.2%
ECO100465	UUR100253	33%	99.5%	98.1%
ECO100465	VCH100969	73%	99.5%	99.5%
ECO100465	YPS001716	87%	100%	100%
ECO100468	ABA104316	27%	50.7%	63.8%
ECO100468	EBC103990	93%	100%	100%
ECO100468	ECO100468	100%	100%	100%
ECO100468	KPN303867	89%	100%	100%
ECO100468	MCA101546	24%	57.4%	72.1%

WO 02/077183

PCT/US02/09107

Overs Legisla Legisla Legisla Coverage Homolog Coverage

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100468	PRT103854	82%	100%	100%
ECO100468	SPA107646	92%	100%	100%
ECO100468	STY100845	94%	100%	100%
ECO100468	STM100558	94%	100%	100%
ECO100468	VCH103521	69%	100%	100%
ECO100468	VCH101110	75%	100%	100%
ECO100468	YPS001600	83%	100%	100%
ECO100469	ABA105707	48%	97.3%	97.0%
ECO100469	BAN105697	24%	61.3%	85.4%
ECO100469	BAN103529	27%	63.6%	89.8%
ECO100469	BAN105257	27%	67.6%	93.7%
ECO100469	BFR10916	30%	63.8%	48.5%
ECO100469	BFR11614	32%	69.9%	50.9%
ECO100469	BBU100446	21%	69.4%	57.9%
ECO100469	BCE111018	51%	97.7%	97.5%
ECO100469	BMA106790	50%	99.3%	98.4%
ECO100469	CBO103826	23%	65.9%	91.1%
ECO100469	CDP101177	26%	90.1%	93.7%
ECO100469	EBC105058	92%	98.2%	98.4%
ECO100469	EFM201852	28%	67.9%	96.1%
ECO100469	ECO100469	100%	100%	100%
ECO100469	KPN309208	91%	100%	100%
ECO100469	MAV102680	29%	64.9%	93.2%
ECO100469	MBV104698	29%	61.5%	86.2%
ECO100469	MLP100477	27%	61.5%	86.5%
ECO100469	MTU203193	29%	61.5%	86.2%
ECO100469	PRT101586	71%	98.0%	95.4%
ECO100469	PAE205513	62%	98.0%	97.0%
ECO100469	PPU103619	33%	68.3%	64.0%
ECO100469	SPA103965	83%	98.2%	100%
ECO100469	STY100846	94%	99.6%	99.6%
ECO100469	SAU401722	23%	66.8%	85.2%
ECO100469	TPA100056	23%	37.6%	47.1%
ECO100469	YPS001597	79%	98.2%	97.3%
ECO100473	BCE112818	22%	90.5%	79.4%
ECO100473	BFU105062	27%	87.5%	92.5%
ECO100473	BMA109015	23%	55.7%	93.1%
ECO100473	CAC101805	21%	87.1%	80.6%
ECO100473	EBC101032	70%	51.1%	100%
ECO100473	ECO100473	100%	100%	100%
ECO100473	KPN305997	67%	96.2%	99.2%
ECO100473	PRT105875	47%	99.2%	97.8%
ECO100473	SPA101218	64%	100%	100%
ECO100473	STY100870	65% .	100%	100%
ECO100473	VCH102186	33%	88.6%	80.2%
ECO100473	YPS001582	56%	99.2%	97.4%
ECO100475	ABA101879	41%	7.2%	16.0%
ECO100475	BAN105978	44%	57.4%	98.6%
ECO100475	BAN110321	44%	69.3%	100%
ECO100475	BFR10291	39%	86.6%	98.1%
ECO100475	BPT102136	41%	6.8%	15.8%
ECO100475	BCE110602	43%	73.5%	97.9%
ECO100475	BFU113139	47%	72.8%	81.7%
ECO100475	BMA106854	46%	73.3%	73.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100475	CJU101080	30%	86.9%	89.4%
ECO100475	CAC100879	39%	18.9%	7.9%
ECO100475	CBO102754	38%	99.2%	99.5%
ECO100475	CDF102644	39%	4.6%	16.2%
ECO100475	CDP100778	38%	5.2%	7.9%
ECO100475	EBC100331	89%	4.2%	19.6%
ECO100475	EFA201855	39%	19.2%	7.9%
ECO100475	EFM201092	37%	87.5%	98.5%
ECO100475	ECO100475	100%	100%	100%
ECO100475	HIN100276	37%	3.2%	10.7%
ECO100475	HPY101055	32%	88.0%	99.6%
ECO100475	KPN308679	87%	6.6%	18.6%
ECO100475	LPN101141	44%	77.7%	89.0%
ECO100475	LPN101253	45%	77.7%	88.7%
ECO100475	LMO100878	37%	1,4%	12.6%
ECO100475	MCA100406	36%	87.5%	95.5%
EC0100475	MAV100988	36%	72.9%	81.5%
ECO100475	MBV103852	44%	77.7%	79.7%
ECO100475	MLP101222	34%	87.4%	96.5%
ECO100475	MTU200960	44%	77.7%	81.9%
ECO100475	NGO100160	39%	86.7%	98.1%
EC0100475	NME201398	40%	87.2%	98.6%
ECO100475	PMU101892	39%	2.9%	10.9%
		72%	27.5%	12.7%
ECO100475	PRT105140	41%	7.1%	16.3%
ECO100475	PAE203917	41%	99.6%	98.6%
ECO100475	PPU108258	42%	7.0%	21.1%
ECO100475	PSY102170		·	100%
ECO100475	SPA101217	84%	86.8%	99.9%
ECO100475	STY100871	93%	99.9%	8.3%
ECO100475	STM104228	42%	4.4%	
ECO100475	SAU802557	38%	99.9%	99.5%
ECO100475	SEP201193	37%	7.2%	16.6%
ECO100475	SHA100292	40%	73.9%	100%
ECO100475	SMU100795	41%	4.4%	8.9%
ECO100475	SPN400641	. 43%	72.1%	79.3%
ECO100475	SPY201317	41%	4.6%	8.9%
ECO100475	TPA101026	.34%	3.7%	9.8%
ECO100475	UUR100203	28%	76.9%	92.9%
ECO100475	VCH102181	50%	9.0%	19.3%
ECO100475	YPS001578	66%	7.3%	22.9%
ECO100485	ABA102979	44%	78.8%	90.3%
ECO100485	BPT100402	42%	86.5%	82.4%
ECO100485	BCE103660	39%	98.1%	60.3%
ECO100485	BFU101347	38%	93.3%	90.2%
ECO100485	BMA107037	42%	86.1%	81.2%
ECO100485	CAC101080	25%	84.1%	98.9%
ECO100485	CBO103052	27%	48.6%	52.1%
ECO100485	CDF104317	23%	79.3%	92.3%
ECO100485	EBC103361	92%	90.9%	100%
ECO100485	EFA202370	25%	74.0%	85.1%
ECO100485	ECO100485	100%	100%	100%
ECO100485	KPN303861	87%	100%	95.4%
ECO100485	LMO100084	26%	80.3%	96.4%
ECO100485	NGO100490	35%	75.5%	71.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100485	NME201781	35%	75.5%	71.8%
ECO100485	PRT104443	57%	89.4%	97.9%
ECO100485	PAE202854	49%	91.3%	95.5%
ECO100485	PPU111360	45%	93.8%	91.2%
ECO100485	PSY100343	47%	75%	98.8%
ECO100485	SPA101077	87%	98.1%	94.9%
ECO100485	STY100879	89%	98.1%	100%
ECO100485	SPY201146	27%	84.1%	55.6%
ECO100485	VCH103503	56%	90.9%	88.8%
ECO100485	YPS001527	71%	98.1%	98.1%
ECO100488	ABA100225	26%	47.2%	31.6%
ECO100488	ABA100477	26%	27.1%	80.5%
ECO100488	BAN104847	21%	28.1%	4.3%
ECO100488	BAN109223	31%	7.2%	48.7%
ECO100488	BAN101440	31%	7.6%	43.5%
ECO100488	BAN110288	23%	20.8%	3.8%
ECO100488	BFR104422	59%	1.9%	27%
ECO100488	BCE108121	26%	28.9%	68.0%
ECO100488	BCE104951	26%	49.5%	30.5%
ECO100488	BFU107935	29%	21.0%	31.4%
ECO100488	BFU100092	51%	6.2%	98.9%
ECO100488	BFU100109	28%	9.3%	60.6%
ECO100488	BFU102581	29%	11.2%	4.4%
ECO100488	BMA107682	26%	25.9%	53.9%
ECO100488	CAC100404	28%	7.9%	39.1%
ECO100488	EBC107494	33%	21.5%	50.7%
ECO100488	EBC103412	28%	21.5%	25.6%
ECO100488	EBC104888	26%	28.5%	68.9%
ECO100488	ECO100686	77%	23.5%	70.2%
ECO100488	ECO101427	86%	41.4%	86.8%
ECO100488	ECO100683	77%	88.2%	89.3%
ECO100488	ECO103515	77%	88.2%	90.6%
ECO100488	ECO103405	74%	99.6%	99.7%
ECO100488	ECO100488	100%	100%	100%
ECO100488	MAV107400	23%	19.1%	20.6%
ECO100488	PRT103688	29%	7.3%	73.6%
ECO100488	PRT103361	31%	7.6%	75.1%
ECO100488	PRT103421	25%	11.2%	4.4%
ECO100488	PAE202682	31%	88.3%	88.8%
ECO100488	PPU107712	30%	7.6%	94.3%
ECO100488	PPU109654	27%	6.8%	73.5%
ECO100488	PPU110484	28%	12.0%	92.3%
ECO100488	PPU107101	28%	10.9%	38.6%
ECO100488	PPU109653	28%	41.0%	73.7%
ECO100488	PPU109652	25%	32.9%	38.8%
ECO100488	PPU110482	29%	53.6%	54.8%
ECO100488	PSY108533	33%	4.9%	83.6%
ECO100488	PSY101322	55%	4.1%	24.3%
ECO100488	PSY105816	47%	7.2%	45.3%
ECO100488	PSY102083	25%	44.4%	45.2%
ECO100488	SPA106438	38%	2.5%	16.8%
ECO100488	SPA100247	26%	53.2%	67.7%
ECO100488	STY104094	26%	30.2%	50.1%
ECO100488	STY104095	30%	59.5%	51.1%
	·		······································	, , , , , , , , , , , , , , , , , , , ,

Query Locus	ID Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100488	STM103807	42%	8.0%	50.8%
ECO100488	STM103806	26%	40.7%	49.6%
ECO100488	YPS002860	25%	84.9%	75.6%
ECO100490	ABA100225	43%	36.9%	5.8%
ECO100490	ABA100477	45%	38.6%	10.5%
ECO100490	BAN101440	31%	39.4%	37.8%
ECO100490	BAN109223	31%	39.4%	44.2%
ECO100490	BAN110288	33%	39.4%	4.4%
ECO100490	BCE104951	36%	50.4%	8.6%
ECO100490	BCE108121	46%	39.0%	10.1%
ECO100490	BFU100092	48%	36.9%	97.8%
ECO100490	BFU102581	51%	39.0%	6.1%
ECO100490	BFU100109	47%	41.1%	14.2%
ECO100490	BMA107682	35%	38.6%	8.0%
ECO100490	CAC100404	32%	35.6%	30.3%
EC0100490	EBC103412	43%	38.1%	33.2%
EC0100490	ECO100686	73%	39.8%	19.7%
EC0100490	ECO100080	66%	45.8%	45.5%
ECO100490	ECO103517 ECO103515	75%	39.4%	6.8%
ECO100490	ECO103313 ECO103405	76%	39.8%	6.7%
	, <u></u>	76%		6.7%
ECO100490	ECO100683		39.4%	
ECO100490	ECO100488	80%	92.4%	6.5%
ECO100490	ECO101427	42%		31.4%
ECO100490	ECO100490	100%	100%	100%
ECO100490	PRT103361	33%	38.6%	65.5%
ECO100490	PRT103421	45%	39.4%	7.7%
ECO100490	PAE202682	51%	39.4%	7.0%
ECO100490	PPU107712	49%	23.3%	63.2%
ECO100490	PPU107101	48%	38.6%	22.0%
ECO100490	PPU110482	46%	39.0%	6.6%
ECO100490	PPU109652	45%	40.7%	6.4%
ECO100490	PSY101322	55%	24.6%	23.9%
ECO100490	PSY105816	46%	39.0%	40.8%
ECO100490	PSY102083	47%	39.0%	5.8%
ECO100490	SPA106438	46%	37.3%	40%
ECO100490	STY104095	48%	38.6%	10.8%
ECQ100490	STY104094	51%	37.3%	6.6%
ECO100490	STM103806	49%	37.7%	6.7%
ECO100490	STM103807	49%	37.7%	37.0%
ECO100490	YPS002860	47%	39.4%	6.4%
ECO100491	ECO100491	100%	100%	100%
ECO100499	ABA104957	38%	99.6%	97.3%
ECO100499	BCE100249	55%	98.4%	94.4%
ECQ100499	BFU102476	53%	98.4%	95.1%
ECO100499	BFU114367	56%	98.4%	94.4%
ECO100499	ECO100499	100%	100%	100%
ECO100499	PAE201500	59%	98.4%	97.7%
ECO100499	PPU107167	57%	98.4%	97.7%
ECO100499	SPA103879	83%	100%	100%
ECO100499	STY100931	84%	100%	100%
ECO100499	STM100624	84%	100%	100%
ECO100500	ABA103985	44%	98.6%	99.0%
ECO100500	BPT100453	34%	93.5%	99.3%
ECO100500	BCE106184	65%	99.0%	97.0%
				<u> </u>

575

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100500	BFU104727	64%	99.7%	96.0%
ECO100500	EFA200236	38%	95.9%	94.9%
ECO100500	EFM201855	40%	96.2%	95.6%
ECO100500	ECO100500	100%	100%	100%
ECO100500	HPY200581	30%	97.3%	98.6%
ECO100500	LMO101779	41%	95.9%	98.3%
ECO100500	PAE201499	62%	99.3%	98.3%
ECO100500	PPU100008	63%	99.3%	98.0%
ECO100500	SPA103880	90%	100%	100%
ECO100500	STY100932	91%	100%	100%
ECO100500	STM100645	91%	100%	100%
ECO100501	ECO100501	100%	100%	100%
ECO100501	STM104546	57%	53.3%	58.3%
ECO100502	ABA104757	29%	99.3%	89.2%
ECO100502	BCE108546	28%	98.2%	82.9%
ECO100502	BFU103203	26%	96.3%	79.2%
ECQ100502	BMA100176	27%	96.3%	79.2%
ECO100502	EBC101321	30%	36.8%	93.7%
ECO100502	EFA202073	53%	97.9%	86.5%
ECQ100502	ECO100502	100%	100%	100%
ECO100502	KPN301121	28%	96.8%	84.7%
ECO100502	PAE200475	30%	98.2%	74.4%
ECO100502	PPU107187	28%	96.3%	78.9%
ECO100502	PSY103157	26%	95.4%	85.9%
ECO100502	SPA103881	91%	100%	90.3%
ECO100502	STM100647	92%	100%	100%
ECO100502	YPS002040	27%	96.8%	85.4%
ECO100522	EBC104095	61%	93.5%	100%
ECO100522	ECO100522	100%	100%	100%
ECO100522	LPN101710	27%	35.2%	30.8%
ECO100522	PRT104641	26%	77.4%	75.5%
ECO100522	PRT103064	29%	92.2%	95.5%
ECO100522	PRT105670	29%	98.3%	97.8%
ECO100522	PRT105544	30%	95.7%	98.6%
ECO100522	PRT105082	33%	93.5%	95.9%
ECO100522	PRT101027	42%	97.0%	96.9%
ECO100522	PRT101728	46%	96.1%	94.0%
ECO100522	PRT105207	46%	93.0%	93.0%
ECO100522	SPA101492	64%	96.5%	93.7%
ECO100522	STY101296	62%	99.6%	99.6%
ECO100522	STM101010	61%	99.6%	99.6%
ECO100523	BBU100344	26%	17.1%	36.2%
ECO100523	BMA102682	37%	95.0%	95.5%
ECO100523	CDF100539	22%	18.0%	56.5%
ECO100523	EBC104108	65%	95.6%	99.3%
ECO100523	ECO100523	100%	100%	100%
ECO100523	KPN201537	39%	95.8%	98.7%
ECO100523	MAV108170	24%	20.3%	37.6%
ECO100523	PRT104636	44%	97.5%	99.3%
ECO100523	SPA103196	72%	68.5%	100%
ECO100523	STY101297	69%	98.6%	98.5%
ECO100523	STM101011	70%	98.6%	98.5%
ECO100523	SAU300377	26%	11.5%	52.7%
ECO100541	EBC101703	52%	98.4%	95.4%

576

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100541	ECO100541	100%	100%	100%
ECO100541	PRT105258	53%	48.8%	98.4%
ECO100541	PRT100296	49%	96.9%	93.2%
ECO100541	YPS000017	65%	94.5%	93.0%
ECO100549	ECO100549	100%	100%	100%
ECO100554	ABA101274	33%	40.6%	26.5%
ECO100554	ABA101204	39%	31.7%	23.0%
ECO100554	ABA104217	29%	37.8%	27.6%
ECO100554	BFR101004	32%	28.9%	11.4%
ECQ100554	BFR105341	35%	31.3%	13.8%
ECO100554	BCE106065	29%	29.7%	67.3%
ECO100554	BCE113842	31%	49.8%	33.2%
ECO100554	BMA107995	26%	31.3%	22.3%
ECO100554	BMA105539	32%	31.7%	38.9%
ECO100554	ECO101470	28%	92.4%	89.7%
ECO100554	ECO103438	36%	93.6%	96.3%
ECO100554	ECO100554	100%	100%	100%
ECO100554	LPN103151	28%	32.9%	24.5%
ECO100554	MBV100183	26%	55.4%	37.6%
ECO100554	MTU301482	26%	55.4%	36.9%
ECO100554	NME102614	33%	29.7%	24.6%
ECO100554	PRT101349	35%	39.8%	39.5%
ECO100554	PRT104740	34%	51.8%	48.0%
ECO100554	PAE202094	29%	33.3%	25%
ECO100554	PAE203213	31%	30.5%	22.6%
ECO100554	PPU102277	25%	37.8%	26.4%
ECO100554	PPU101064	31%	30.5%	21.5%
ECO100554	SPA100934	36%	50.6%	51.4%
ECO100554	SPA103838	40%	49.8%	40.1%
ECO100554	STY102368	37%	49.0%	48.6%
ECO100554	STY102403	33%	73.9%	64.9%
ECO100554	STM103734	40%	49.8%	40.1%
ECO100554	SMU100002	29%	37.8%	27.9%
ECO100554	VCH100823	29%	49.0%	44.2%
ECO100555	BFU112796	28%	18.3%	36.0%
ECO100555	EBC102973	48%	100%	97.1%
ECO100555	ECO100555	100%	100%	100%
ECO100555	LPN101913	38%	97.8%	98.7%
ECO100555	PPU103428	23%	56.8%	38.8%
ECO100555	SPA103146	46%	100%	100%
ECO100555	STY101101	46%	100%	100%
ECO100555	YPS000286	40%	91.5%	90.4%
ECO100557	ABA102872	22%	69.9%	59.8%
ECO100557	ECO100557	100%	100%	100%
ECO100557	PPU111671	33%	99.3%	98.9%
ECO100557	PSY102041	25%	73.3%	70.7%
ECO100560	BAN106854	24%	24.4%	90.1%
ECO100560	BAN112348	33%	23.8%	76.5%
ECO100560	BAN100221	25%	74.8%	77.7%
ECO100560	BAN103717	26%	62.5%	96.9%
ECO100560	BAN100334	26%	57.1%	93.3%
ECO100560	BAN102939	26%	74.8%	76.4%
ECO100560	BAN113334	25%	63.5%	84.6%
ECO100560	BAN102333	27%	68.8%	71.4%

VO 02/077183		·		PCT/US02/09107
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100560	BAN110951	28%	62.5%	67.8%
ECO100560	BFR10765	27%	59.6%	63.9%
ECO100560	BFR103543	27%	64.0%	68.4%
ECO100560	BPT104047	31%	97.9%	96.7%
ECO100560	BCE114206	31%	97.9%	97.4%
ECO100560	BFU111283	42%	61.7%	63.6%
ECO100560	BFU103037	32%	97.7%	98.6%
ECO100560	BMA100332	31%	98.3%	98.1%
ECO100560	CAC102666	28%	60.6%	62.2%
ECO100560	CDF100992	28%	52.7%	65.7%
ECO100560	EBC104519	56%	99.8%	97.8%
ECO100560	ECO100560	100%	100%	100%
ECO100560	KPN302405	66%	98.5%	98.3%
ECO100560	LPN102226	32%	63.3%	88.0%
ECO100560	LMO102551	24%	99.8%	98.6%
ECO100560	PAE202808	41%	68.3%	72.7%
ECO100560	PPU101821	35%	97.7%	98.4%
ECO100560	PPU101984	35%	97.9%	96.4%
ECO100560	PSY104285	40%	67.3%	70.9%
ECO100560	SAU801414	23%	95%	96.5%
ECO100560	YPS003206	35%	67.1%	69.3%
ECO100572	ECO100572	100%	100%	100%
ECO100572	ECO100016	100%	100%	100%
ECO100572	ECO102351	100%	100%	99.5%
ECO100572	KPN301837	28%	24.6%	33.5%
ECO100572	KPN301756	28%	24.6%	25.9%
ECO100572	PPU112458	31%	21.6%	17.3%
ECO100572	PPU110183	31%	21.6%	18.0%
ECO100572	PPU100534	31%	21.6%	17.3%
ECO100572	PPU111918	31%	21.6%	17.3%
ECO100572	PPU111424	31%	21.6%	17.3%
ECO100572	PPU109580	31%	21.6%	17.3%
ECO100572	STY100108	28%	24.6%	25.9%
ECO100582	BAN107042	36%	24.8%	26.5%
ECO100582	BAN100797	25%	61.9%	58.9%
ECO100582	BAN107954	22%	56.0%	61.5%
ECO100582	BAN107919	23%	84.3%	79.6%
ECO100582	CAC102393	22%	47.5%	43.3%
ECO100582	CDF102033	25%	37.7%	36.8%
ECO100582	EBC100468	78%	74.8%	100%
ECO100582	EFA205322	25%	90.6%	88.1%
ECO100582	ECO100582	100%	100%	100%
ECO100382	KPN304825	84%	96.2%	96.2%
······································	PRT102496	24%	69.8%	63.2%
ECO100582 ECO100582	PAE204156	41%	97.8%	98.0%
		76%	100%	100%
ECO100582	SPA102125	79%	100%	100%
ECO100582	STY101372	24%	88.4%	86.1%
ECO100582	SHA100136	22%	81.4%	76.5%
ECO100582	SPY200281 VCH100763	36%	96.5%	92%
ECO100582 ECO100582		53%	92.1%	86.9%
∟ r.c.OTUU582.	YPS002778			
	ADA 102671	560/	1 00 50/	1 02 70%
ECO100584 ECO100584	ABA103671 BAN111652	56% 41%	98.5%	98.7%

578

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100584	BCE105183	43%	65.1%	93.5%
ECO100584	EBC100728	73%	81.9%	100%
ECO100584	ECO100584	100%	100%	100%
ECO100584	KPN304829	81%	98.7%	98.9%
ECO100584	MAV100968	42%	98.7%	96.7%
ECO100584	MBV101299	37%	97.4%	95.3%
ECO100584	MTU202348	39%	97.4%	93.6%
ECO100584	PAE204226	46%	98.7%	96.7%
ECO100584	PSY105284	42%	90.7%	92.5%
ECO100584	SPA100882	82%	99.6%	100%
ECO100584	STY101374	85%	99.6%	99.4%
ECO100584	STM101106	86%	99.6%	99.6%
ECO100584	VCH100759	48%	98.5%	98.0%
ECO100584	YPS002354	42%	93.7%	95.0%
EC0100593	EBC102628	50%	99%	99.3%
ECO100593	ECO100593	100%	100%	100%
ECO100593	KPN303370	48%	97.7%	94.2%
ECO100593	SPA103039	53%	99.3%	99.3%
ECO100593	STY101394	54%	99.3%	99.3%
ECO100619	EBC101386	61%	100%	83.9%
ECO100619	ECO100619	100%	100%	100%
ECO100619	KPN302688	50%	100%	89.3%
ECO100619	SPA102530	61%	100%	100%
ECO100619	STY101451	68%	100%	83.9%
ECO100632	ABA105508	56%	99.5%	99.1%
ECO100632	BAN102826	43%	99.3%	99.5%
ECO100632	BFR10298	34%	99.5%	99.9%
ECO100632	BPT102350	48%	99.8%	99.9%
ECO100632	BBU100250	38%	99.5%	99.6%
ECO100632	BCE103321	49%	99.9%	100%
ECO100632	BMA109061	49%	99.9%	94.6%
ECO100632	CJU101017	43%	99.4%	99.6%
ECO100632	CPN200606	41%	99.5%	99.9%
ECO100632	CTR200474	40%	99.5%	99.9%
ECO100632	CAC101070	40%	99.0%	99.1%
ECO100632	CBO100961	40%	98.8%	99.0%
ECO100632	CDF103555	44%	99.4%	99.5%
ECO100632	CDP101454	36%	99.0%	97.1%
ECO100632	EBC100539	92%	55.2%	100%
ECO100632	EFA200538	42%	99.3%	99.5%
ECO100632	EFM200610	43%	99.3%	99.5%
ECO100632	ECO100632	100%	100%	100%
ECO100632	HIN100900	72%	99.9%	99.8%
ECO100632	HPY101524	42%	98.8%	99.3%
ECO100632	KPN300581	97%	18.4%	96.3%
ECO100632	KPN302684	95%	99.8%	100%
ECO100632	LPN103327	54%	100%	100%
ECQ100632	LMO100611	42%	99.3%	99.5%
ECO100632	MCA102972	49%	99.7%	99.0%
ECO100632	MAV103767	37%	96.3%	90.9%
ECO100632	MBV104696	37%	96.2%	92.8%
ECO100632	MLP100028	36%	99.9%	97.7%
ECO100632	MTU200041	37%	96.2%	93.0%
ECO100632	MGE100272	34%	99.4%	99.6%

WO 02/077183	P	CT/U	US02/09107

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100632	MPN100453	34%	99.4%	99.5%
ECO100632	NGO100059	57%	99.9%	99.8%
ECO100632	NME200518	55%	99.9%	100%
ECO100632	PMU101214	72%	99.8%	99.8%
ECO100632	PRT102887	80%	100%	100%
ECO100632	PAE203984	57%	99.8%	99.8%
ECO100632	PPU108817	57%	99.8%	99.8%
ECO100632	PSY105072	57%	99.8%	99.8%
ECO100632	SPA100430	93%	58.6%	98.8%
ECQ100632	STY101466	95%	100%	100%
ECO100632	SAU801760	42%	99.3%	99.5%
ECO100632	SEP202121	42%	99.3%	99.5%
ECO100632	SHA100631	42%	99.3%	99.5%
ECO100632	SMU100492	40%	99.4%	99.5%
ECO100632	SPN400235	42%	99.4%	99.5%
ECO100632	SPY200128	42%	99.4%	99.5%
ECO100632	TPA100579	39%	98.8%	99.2%
ECO100632 ECO100632	UUR100373	34%	99.4%	99.9%
	VCH100940	75%	99.8%	95.7%
ECO100632	YPS001199	84%	100%	100%
ECO100632		41%	99.0%	100%
ECO100645	ABA101420	46%	98.3%	96.7%
ECO100645	BPT102527		100%	99%
ECO100645	BCE104111	65%		85.4%
ECO100645	BFU109692	45%	99.0%	100%
ECO100645	BMA102165	72%	86.8%	100%
ECO100645	.EBC102933	91%	100%	
ECO100645	ECO100645	100%	100%	100%
ECO100645	KPN300407	91%	41.7%	100%
ECO100645	KPN302708	89%	100%	100%
ECO100645	PRT102877	75%	100%	100%
ECO100645	PAE201341	58%	97.4%	97.7%
ECO100645	PPU101496	57%	96.4%	97.4%
ECO100645	PSY105194	55%	96.4%	94.8%
ECO100645	SPA102587	95%	92.1%	100%
ECO100645	STY101796	93%	100%	98.1%
ECO100645	YPS001209	78%	100%	100%
ECO100647	ABA104991	36%	96.5%	92.3%
ECO100647	BPT100972	30%	94.1%	98.1%
ECO100647	BBU100236	28%	32.4%	32.1%
ECO100647	BCE102700	33%	92.2%	82.3%
ECO100647	BFU103489	32%	95.9%	92.9%
ECO100647	BMA107358	31%	70.3%	97.8%
ECO100647	CJU101021	23%	53.7%	55.1%
ECO100647	CPN200092	23%	95.3%	92.1%
ECO100647	CTR200810	28%	35.2%	34.9%
ECO100647	CAC101602	24%	29.7%	62.6%
ECO100647	CDP101117	24%	81.6%	90.6%
ECO100647	EBC102934	85%	99.6%	100%
ECO100647	ECO100647	100%	100%	100%
ECO100647	HIN100288	44%	97.1%	95.4%
ECQ100647	HPY100177	23%	60.5%	66.8%
ECO100647	KPN302711	83%	100%	100%
ECO100647	LPN102781	30%	84.6%	98.6%
	MCA100961	36%	96.3%	94.9%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100647	MAV106114	25%	97.3%	82.0%
ECO100647	MBV102260	26%	97.1%	94.9%
ECO100647	MLP100891	24%	96.9%	79.2%
ECO100647	MTU202018	26%	97.1%	57.9%
ECO100647	NGO101835	31%	97.1%	96.5%
ECO100647	NME200849	31%	97.1%	96.5%
ECO100647	PMU101032	45%	96.3%	94.0%
ECO100647	PRT102866	61%	96.5%	97.2%
ECO100647	PAE203981	40%	95.7%	95.1%
ECO100647	PPU107601	41%	94.3%	94.7%
ECO100647	PSY105070	41%	95.1%	95.7%
ECO100647	SPA102458	85%	76.2%	100%
ECO100647	STY101797	87%	100%	100%
ECO100647	TPA100249	25%	69.9%	72.0%
ECO100647	TPA100413	25%	75.6%	76.6%
ECO100647 ECO100647	VCH100942	48%	99.0%	99.2%
ECO100647 ECO100647	YPS001211	65%	99.6%	99.2%
ECQ100648	ABA106059	43%	83.6%	89.6%
ECO100648	BFR10598	34%	86.6%	57.9%
ECO100648	BPT100973	42%	91.8%	89.8%
ECO100648	BBU100059	37%	79.8%	90.7%
ECO100648	BCE102638	45%	90.4%	88.1%
ECO100648	BFU103492	45%	88.4%	82.6%
ECO100648	BMA100300	44%	95.5%	89.3%
ECO100648	CPN200241	32%	70.5%	53.5%
ECO100648	CTR200696	30%	77.4%	60.7%
ECO100648 ECO100648	CDP100549	33%	91.1%	64.0%
ECO100648	EBC102935	94%	100%	100%
	EFM200835	33%	85.6%	56.1%
ECO100648	ECO100648	100%	100%	100%
ECO100648		63%	97.3%	95.7%
ECO100648	HIN100287	96%	100%	92.7%
ECO100648	KPN302676			88.4%
ECO100648	LPN103355	47%	86.3%	61.8%
ECO100648	LMO101012	30%		94.8%
ECO100648	MCA100807	40%	93.8%	
ECO100648	MAV100201	36%	76.0%	51.8%
ECO100648	MBV102614	37%	76.0%	52.0%
ECO100648	MTU202330	37%	76.0%	
ECO100648	MGE100148	26%	66.8%	45.5%
ECO100648	MPN100672	25%	66.8%	45.5%
ECO100648	NGO101904	51%	90.8%	96.4%
ECO100648	NME200659	51%	90.8%	96.4%
ECO100648	PMU101033	64%	95.9%	93%
ECO100648	PRT102899	84%	99.3%	98.6%
ECO100648	PAE203980	51%	91.4%	96.1%
ECO100648	PPU112260	52%	91.4%	96.1%
ECO100648	PSY105068	52%	91.4%	95.7%
ECO100648	SPA102459	96%	100%	100%
ECO100648	STY101798	97%	100%	100%
ECO100648	SPN401776	34%	76.0%	49.7%
ECO100648	SPY200275	34%	79.1%	52.0%
ECO100648	TPA100641	35%	78.8%	86.0%
ECO100648	VCH100943	66%	96.9%	96.6%
ECO100648	YPS001216	86%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100652	BFR100448	41%	10.0%	16.5%
ECO100652	BPT101695	33%	97.7%	98.5%
ECO100652	EBC100475	77%	91.8%	100%
ECO100652	ECO100652	100%	100%	100%
ECO100652	KPN302701	78%	100%	100%
ECO100652	MBV101815	24%	79.8%	76.2%
ECO100652	MTU201729	24%	80.6%	68.9%
ECO100652	PMU101002	50%	98.5%	98.5%
ECO100652	PRT102895	60%	98.5%	97.7%
ECO100652	SPA102463	83%	100%	100%
ECO100652	STY101812	85%	100%	100%
ECO100652	STM101551	85%	100%	100%
ECO100652	VCH100947	52%	99.7%	96.7%
ECO100652	YPS001221	63%	99.5%	99.2%
ECO100659	BFR10535	28%	87.9%	90.3%
ECO100659	BMA106268	32%	16.5%	22.1%
ECO100659	CBO102186	30%	74.6%	96.5%
ECO100659	CDP101325	27%	70.4%	90.2%
ECO100659	EBC101470	91%	100%	100%
ECO100659	EFM101256	25%	92.9%	95.3%
ECO100659	ECO100659	100%	100%	100%
ECO100659	KPN301178	88%	100%	100%
ECO100659	LMO100695	30%	82.3%	82.2%
ECO100659	MAV103808	23%	79.8%	62.5%
ECO100659	MBV102332	22%	79.8%	78.8%
ECO100659	MTU408202	22%	79.8%	78.8%
ECO100659	PMU100683	54%	97.8%	98.3%
ECO100659	PRT100305	70%	98.5%	98.3%
ECO100659	PSY101979	30%	18.0%	33.3%
ECO100659	PSY105778	23%	49.8%	60.1%
ECO100659	SPA101689	93%	100%	100%
ECO100659	STY101819	94%	100%	100%
ECO100659	SMU100070	28%	74.1%	96.3%
ECO100659	SPN201158	27%	80.0%	83.9%
ECO100659	SPY201178	29%	74.9%	97.2%
ECO100659	VCH100976	60%	98.3%	99.0%
ECO100659	YPS001229	78%	99.8%	99.0%
ECO100661	BAN112647	36%	79.7%	93.1%
ECO100661	BAN106376	34%	90.6%	87.0%
ECO100661	BFR104796	64%	98.9%	97.4%
ECO100661	BBU100151	60%	98.5%	97.8%
ECO100661	BFU102111	22%	44.4%	19.7%
ECO100661	CAC101312	36%	92.9%	100%
ECO100661	CBO103757	38%	94.0%	98.0%
ECO100661	CDF100159	38%	40.6%	89.9%
ECO100661	CDF100928	38%	94.0%	98.0%
ECO100661	CDP101713	44%	79.7%	81.9%
ECO100661	EBC101472	93%	100%	100%
ECO100661	EFA201130	34%	92.9%	100%
ECO100661	EFM201449	33%	92.9%	100%
ECO100661	ECO100661	100%	100%	100%
ECO100661	HIN100134	74%	97.4%	95.9%
ECO100661	KPN301180	93%	100%	100%
ECO100661	LMO102723	39%	76.7%	83.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100661	MLP100363	25%	59.8%	64.0%
ECO100661	MTU401062	23%	76.3%	80.6%
ECO100661	MTU406545	27%	58.6%	83.3%
ECO100661	PMU100875	76%	100%	99.6%
ECO100661	PRT101157	75%	94.0%	97.3%
ECO100661	SPA101691	95%	67.7%	100%
ECO100661	STY101831	95%	100%	100%
ECO100661	SAU800569	35%	77.1%	81.3%
ECO100661	SEP200118	31%	90.6%	97.1%
EC0100661	SHA102516	37%	82.0%	90.5%
ECO100661	SMU100790	38%	77.1%	84.5%
ECO100661	SPN401271	32%	90.2%	94.2%
ECO100661	SPY201070	35%	79.3%	86.8%
EC0100661	VCH103743	79%	99.6%	99.6%
ECO100661	YPS001237	85%	100%	100%
EC0100662	BAN102604	46%	71.6%	100%
ECO100662	BAN102323	52%	71.6%	100%
EC0100662	BCE100659	55%	65.6%	98.9%
ECO100662	BFU102702	55%	74.1%	81.8%
ECO100662	BMA108578	54%	73.1%	98.5%
ECO100662	CTR200280	35%	10.6%	18.4%
ECO100662	CAC100601	48%	71.9%	98.8%
EC0100662	CBO100356	42%	18.8%	63.9%
ECO100662	CBO100330	38%	99.2%	99.1%
ECO100662	EBC101577	45%	70.7%	100%
ECO100662	EFA201939	40%	95.4%	95.6%
ECO100662	EFM200960	40%	96.6%	96.8%
ECO100662	ECO100662	100%	100%	100%
ECO100662	KPN301181	88%	99.8%	99.7%
ECO100662	MGE100071	32%	2.9%	20.9%
ECO100662	MPN100624	32%	2.9%	21.1%
ECO100662	PMU100876	43%	71.9%	99.8%
ECO100662	PRT101158	48%	100%	100%
ECO100662	PAE203758	50%	71.1%	98.4%
ECO100662	SPA101338	90%	99.8%	99.7%
ECO100662	STY101832	92%	99.8%	99.7%
ECO100662	STM101632	92%	99.8%	99.7%
ECO100662	SAU800189	39%	95.1%	95.2%
ECO100662	SEP201169	39%	96.0%	96.0%
ECO100662	SHA102201	38%	96.0%	98.9%
ECO100662	SMU100648	30%	95.8%	98.3%
ECO100662 ECO100662	SPY201526	31%	97.1%	96.6%
ECO100662	VCH100978	47%	71.8%	97.7%
ECO100662	YPS001239	52%	99.8%	99.7%
ECO100662 ECO100663	ABA100614	54%	70.2%	98.7%
	BFR11594	52%	99.3%	98.3%
ECO100663 ECO100663	BPT101559	50%	99.1%	99.5%
ECO100663 ECO100663	BCE112007	56%	98.0%	97.7%
	BFU109691	56%	98.0%	97.7%
ECO100663	BMA101111	57%	98.2%	93.5%
ECO100663	CDF100047	54%	98.4%	98.7%
ECO100663	EBC101578	94%	100%	100%
ECO100663		100%	100%	100%
ECO100663	ECO100663		97.7%	97.1%
ECO100663	HIN101320	76%	71.170	21.170

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100663	KPN300629	92%	79.2%	100%
ECO100663	LPN102284	55%	7.2%	20.1%
ECO100663	LPN100517	56%	99.6%	99.8%
ECO100663	MCA100651	51%	99.1%	99.5%
ECO100663	NGO101291	60%	97.5%	97.7%
ECO100663	NME201607	60%	97.5%	95.8%
ECO100663	PMU100528	77%	98.0%	97.1%
ECO100663	PRT105627	85%	100%	99.6%
ECO100663	PAE201793	60%	99.1%	99.1%
ECO100663	PPU108911	62%	98.6%	96.8%
ECO100663	PSY100233	62%	98.2%	97.0%
EC0100663	SPA101340	95%	98.9%	100%
ECO100663	STY101833	95%	100%	100%
ECO100663	STM101572	96%	100%	100%
EC0100663	VCH100980	80%	100%	99.8%
ECO100663	YPS001246	87%	99.3%	99.1%
EC0100668	BCE111918	35%	49.2%	54.6%
ECO100668	BFU104827	30%	45.8%	59.8%
ECO100008	CBO100905	27%	70.8%	11.1%
ECO100668	EBC100041	81%	54.2%	100%
ECO100668	ECO100668	100%	100%	100%
ECO100668	KPN202849	81%	100%	100%
ECO100668	PMU100354	65%	70%	89.4%
	PRT103333	83%	74.2%	91.8%
ECO100668	SPA102662	89%	80.8%	100%
ECO100668	SFA102002 STY101854	90%	80.8%	100%
ECO100668	YPS001261	86%	74.2%	93.7%
ECO100668			46.5%	44.8%
ECO100669	BAN106734	28%	37.8%	33.3%
ECO100669	BAN100793	32%		.
ECO100669	BAN108978	32%	37.8%	60.1%
ECO100669	BPT102964	23%	84.6%	68.9%
ECO100669	BFU101564	23%	92.1%	73.2%
ECO100669	EBC100042	68%	31.1%	97.5%
ECO100669	EFM201132	22%	53.1%	57.0%
ECO100669	ECO100669	100%	100%	100%
ECO100669	HIN100182	42%	98.8%	88.2%
ECO100669	KPN300270	85%	98.0%	100%
ECO100669	LPN102659	22%	95.3%	91.9%
ECO100669	LPN103657	28%	39.0%	36.2%
ECO100669	LMO100596	31%	41.7%	43.5%
ECO100669	MAV103780	24%	81.9%	72.4%
ECO100669	MBV106260	23%	81.9%	73.8%
ECO100669	MLP101364	22%	83.9%	75.3%
ECO100669	MTU200045	23%	81.9%	73.8%
ECO100669	MPN100323	42%	19.3%	17.6%
ECO100669	PMU100355	45%	94.5%	92.7%
ECO100669	PRT100195	58%	93.7%	89.8%
ECO100669	SPA102660	89%	100%	100%
ECO100669	STY101855	89%	100%	99.2%
ECO100669	STM104159	32%	45.3%	39.8%
ECO100669	SAU800615	22%	96.1%	93.9%
ECO100669	SHA101552	27%	37.4%	33.6%
ECO100669	UUR100019	23%	43.3%	38.4%
ECO100669	VCH102065	48%	92.5%	93.0%

Query LocusID	Homolog LocusII	Identity	Query Cover	PCT/US02/09107 age "Homolog Coverage"
ECO100669	YPS001274	65%	99.6%	99.2%
ECO100672	CAC102879	34%	25%	8.6%
ECO100672	ECO100672	100%	100%	100%
ECO100683	ABA100225	26%	67.7%	56.8%
ECO100683	ABA100477	27%	24.1%	97.4%
ECO100683	BAN104847	19%	15,4%	26.9%
ECO100683	BAN109223	29%	7.2%	47.8%
ECO100683	BAN101440	29%	7.6%	42.7%
ECO100683	BAN110288	24%	23.0%	18.6%
ECO100683	BFR104422	62%	1.9%	27%
ECO100683	BCE104951	24%	86.2%	67.5%
ECO100683	BCE108121	27%	52.8%	59.9%
ECO100683	BFU100092	47%	6.3%	98.9%
ECO100683	BFU107935	31%	21.7%	7.3%
EC0100683	BFU100109	28%	14.8%	59.1%
ECO100683	BFU102581	29%	54.0%	49.1%
ECO100683	BMA107682	24%	50.1%	25.9%
ECO100683	CAC100404	29%	6.3%	31.6%
ECO100683	EBC107494	28%	9.8%	85%
ECO100683	EBC107494 EBC103412	28%	9.0%	59.2%
ECO100683	EBC103412 EBC104888	25%	64.4%	82.5%
	ECO100686	96%	23.3%	68.1%
ECO100683		76%	37.7%	78.2%
ECO100683	ECO101427		89.3%	
ECO100683	ECO100488	77%		88.2%
ECO100683	ECO103405	96%	89.3%	88.4%
ECO100683	ECO103515	96%	89.9%	91.2%
ECO100683	ECO100683	100%	100%	100%
ECO100683	PRT103688	31%	7.4%	73.6%
ECO100683	PRT103361	33%	8.1%	78.0%
ECO100683	PRT103421	25%	54.0%	66.8%
ECO100683	PAE202682	32%	90.6%	89.7%
ECO100683	PPU107712	33%	7.7%	93.1%
ECO100683	PPU110484	26%	21.5%	52.2%
ECO100683	PPU109654	25%	9.2%	55.3%
ECO100683	PPU107101	42%	3.9%	5.5%
ECO100683	PPU109653	28%	41.4%	38.3%
ECO100683	PPU109652	26%	55.8%	54.6%
ECO100683	PPU110482	26%	11.1%	5.4%
ECO100683	PSY108533	33%	5.0%	83.6%
ECO100683	PSY101322	59%	4.2%	24.3%
ECO100683	PSY105816	46%	7.4%	46.2%
ECO100683	PSY102083	24%	13.7%	11.8%
ECO100683	SPA106438	45%	6.1%	5.5%
ECO100683	SPA100247	27%	53.8%	67.7%
ECO100683	STY104094	25%	87.3%	77.3%
ECO100683	STY104095	30%	53.2%	39.6%
ECO100683	STM103807	45%	8.0%	46.3%
ECO100683	STM103806	25%	87.3%	76.6%
ECO100683	YPS002860	24%	86.3%	75.9%
ECO100702	ECO102977	37%	97.9%	97.8%
ECO100702	ECO100702	100%	100%	100%
ECO100702	PRT100741	24%	96.3%	94.1%
ECO100702	PRT100538	22%	95.7%	94.0%
ECO100702	PRT104405	27%	95.7%	98.3%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100702	PRT100936	26%	96.3%	98.9%
ECO100702	PRT105615	27%	95.7%	96.2%
ECO100702	PRT104834	26%	88.3%	87.4%
ECO100702	PRT104207	28%	88.3%	87.4%
ECO100702	PRT101358	32%	96.3%	97.3%
ECO100702	SPA102695	31%	95.7%	97.4%
ECO100702	STY104107	32%	95.7%	96.4%
ECO100702	YPS002768	38%	96.3%	94.6%
ECO100703	ABA104184	67%	97.9%	98.1%
ECO100703	BPT101628	62%	100%	99.5%
ECO100703	BCE109200	66%	98.6%	98.2%
ECO100703	BFU112530	65%	97.7%	97.2%
ECO100703	BFU100597	66%	99.8%	99.3%
ECO100703	BMA100455	66%	98.6%	98.2%
ECO100703	CJU101587	50%	93.4%	95.0%
EC0100703	CDP100042	50%	93.4%	93.9%
EC0100703	EBC101675	96%	100%	100%
EC0100703	ECO100703	100%	100%	100%
EC0100703	HPY100025	43%	93.4%	96.5%
EC0100703	KPN302561	95%	99.5%	100%
EC0100703	LPN103215	64%	98.8%	100%
EC0100703	MCA103218	62%	99.1%	99.1%
EC0100703	MAV104827	54%	98.6%	98.6%
ECO100703	MBV101665	52%	98.6%	98.6%
EC0100703	MLP101277	52%	98.6%	98.6%
ECO100703	MTU200887	52%	98.6%	98.6%
	NGO101276	66%	97.2%	97.4%
ECO100703	NME201060	66%	97.2%	97.4%
ECO100703 ECO100703	PMU100276	71%	99.1%	99.1%
ECO100703	PRT102070	85%	99.8%	99.5%
ECO100703	PAE201579	70%	98.6%	98.4%
ECO100703	PPU107315	72%	98.4%	98.1%
ECO100703	PSY108243	72%	98.4%	98.1%
	SPA100177	91%	78.0%	100%
ECO100703		96%	100%	100%
ECO100703	STY101915			97.9%
ECO100703	VCH102060	77%	98.6%	
ECO100703	YPS002059	86%	100%	100%
ECO100706	ABA105020	52%	98.8%	97.2%
ECO100706	BPT101632	57%	99.7%	99.5%
ECO100706	BCE112329	55%	99.7%	98.8%
ECO100706	BFU100599	55%	99.7%	98.8%
ECO100706	BMA107039	55%	99.7%	98.8%
ECO100706	CTR100036	31%	92.2%	98.6%
ECO100706	EBC101678	96%	60.9%	100%
ECO100706	ECO100706	100%	100%	100%
ECO100706	HPY100189	35%	93.5%	82.1%
ECO100706	KPN301276	98%	100%	99.3%
ECO100706	LPN103357	69%	100%	100%
ECO100706	MCA101639	51%	99.7%	97.1%
ECO100706	MAV101732	48%	98.8%	99.0%
ECO100706	MBV103459	48%	98.8%	99.0%
ECO100706	MLP100428	47%	98.8%	99.0%
ECO100706	MTU203275	48%	98.8%	99.0%
ECO100706	NGO101280	56%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100706	NME201057	56%	100%	100%
ECO100706	PRT102073	92%	100%	100%
ECO100706	PAE201582	70%	98.8%	98.6%
ECO100706	PPU103107	69%	99.7%	99.5%
ECO100706	PSY104872	70%	96.8%	100%
ECO100706	SPA103275	78%	48.8%	100%
ECO100706	STY101918	97%	100%	100%
ECO100706	STM101667	97%	100%	100%
ECO100706	SHA100620	34%	59.5%	95.4%
ECO100706	VCH102057	82%	100%	100%
ECO100706	YPS002062	92%	100%	100%
ECO100712	ABA101768	71%	100%	98.3%
ECO100712	BAN108859	56%	100%	96.3%
ECO100712	BAN107819	65%	100%	96.3%
ECO100712	BFR12149	58%	98.6%	99.0%
ECO100712	BPT102810	54%	99.7%	100%
ECO100712	BCE103851	54%	99.7%	100%
ECO100712	BFU103478	52%	99.7%	100%
ECO100712	BMA108528	54%	99.7%	100%
ECO100712	CJU100496	58%	99.7%	99.7%
ECO100712	CPN200869	62%	98.6%	97.3%
ECO100712	CTR200204	61%	98.6%	97.9%
ECO100712	EBC102737	95%	100%	100%
ECO100712	.ECO100712	100%	100%	100%
ECO100712	HIN101170	83%	100%	98.6%
ECO100712	KPN300770	94%	100%	100%
ECO100712	LPN101597	78%	99.3%	99.0%
ECO100712	LMO100662	25%	48.1%	38.4%
ECO100712	MAV101285	54%	100%	99.3%
ECO100712	MBV101961	54%	94.1%	92.7%
ECO100712	MLP100114	50%	99.7%	99%
ECO100712	MTU200943	54%	94.1%	92.7%
ECO100712	NGO101261	72%	100%	98.3%
ECO100712	NME201066	72%	100%	98.3%
ECO100712	PMU100281	86%	100%	100%
ECO100712	PRT102068	94%	99.7%	99.3%
ECO100712	PAE201588	88%	98.3%	96.3%
ECO100712	PPU101203	88%	98.3%	96.6%
ECO100712	PSY104865	88%	98.3%	96.9%
ECO100712	SPA103281	88%	99.3%	100%
ECO100712	STY101933	94%	100%	100%
ECO100712	STM101672	95%	100%	100%
ECO100712	SAU801246	65%	98.3%	94.0%
ECO100712	SEP201540	62%	98.3%	94.0%
ECO100712	SHA100180	64%	84.8%	93.9%
ECO100712	VCH102052	87%	99.3%	99.0%
ECO100712	YPS002067	90%	99.7%	99.3%
ECO100713	BAN101120	29%	80.8%	100%
ECO100713	BAN103767	30%	94.2%	95.0%
ECO100713	BPT101634	28%	94.2%	80.4%
ECO100713	BCE103528	36%	40%	66.2%
ECO100713	BCE107050	30%	82.5% 82.5%	85.3% 85.3%
ECO100713	BMA102686	30%	- 	
ECO100713	CAC103158	29%	95.4%	95.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100713	CBO100441	31%	96.2%	92.5%
ECO100713	CDF102412	32%	95.4%	96.2%
ECO100713	CDP100674	29%	93.3%	89.1%
ECO100713	EFA202447	32%	95%	97.0%
ECO100713	EFM201744	26%	95.4%	94.3%
	ECO100713	100%	100%	100%
ECO100713 ECO100713	MCA101187	25%	86.2%	89.1%
ECO100713	MAV103447	30%	79.6%	70.4%
ECO100713	PPU107953	29%	95%	74.7%
EC0100713	SPA103556	29%	97.5%	95.5%
ECO100713	STY104116	29%	97.5%	95.5%
EC0100713 EC0100713	STM102067	24%	93.8%	92.5%
	SEP200626	35%	28.3%	54.4%
ECO100713 ECO100713		28%	94.6%	95.4%
ECO100713	SHA102044 SMU100634	25%		97.5%
			95.8%	
ECO100713	SPN401698	31%	96.2%	98.3%
ECO100713	SPY200917	30%	96.2%	95.4%
ECO100716	ABA102257	69%	97.5%	96.6%
ECO100716	BAN108041	38%	96.6%	97.3%
ECO100716	BFR104147	43%	92.9%	99.4%
ECO100716	BPT102256	61%	95.6%	92.8%
ECO100716	BCE114299	55%	52.4%	99.6%
ECO100716	BFU102708	57%.	53.9%	94.7%
ECO100716	BFU103213	77%	39.2%	98.1%
ECO100716	BFU102694	66%	98.1%	95.7%
ECO100716	BMA100835	62%	83.7%	97.6%
ECO100716	BMA109632	64%	99.2%	98.1%
ECO100716	CJU100072	45%	95.4%	96.3%
ECO100716	CPN200660	35%	95.6%	97.3%
ECO100716	CTR100525	30%	94.6%	96.6%
ECO100716	CDP100460	35%	92.0%	84.0%
ECO100716	EBC102736	94%	63.3%	100%
ECO100716	ECO100716	100%	100%	100%
ECO100716	HIN101051	64%	98.5%	99.8%
ECO100716	KPN300984	94%	96.0%	100%
ECO100716	LPN101998	59%	96.0%	98.4%
ECO100716	MCA100290	59%	97.7%	96.6%
ECO100716	PMU100974	68%	98.5%	99.8%
ECO100716	PRT103085	81%	95.4%	99.8%
ECO100716	PPU108559	31%	94.5%	91.6%
ECO100716	PSY107712	30%	89.7%	91.0%
ECO100716	SPA103282	95%	96.7%	100%
ECO100716	STY101934	95%	99.8%	100%
ECO100716	STM101673	96%	99.8%	100%
ECO100716	SAU801086	30%	95.8%	96.2%
ECO100716	SHA101846	29%	95.8%	96.9%
ECO100716	VCH103592	70%	98.3%	97.0%
ECO100716	VCH101814	74%	99.2%	95.9%
ECO100716	YPS002068	86%	99.8%	100%
ECO100725	ABA105807	25%	94.7%	97.3%
ECO100725	.BFR102268	27%	43.0%	25.9% ·
ECO100725	BPT102433	25%	98.1%	99.1%
ECO100725	BBU100541	23%	43.0%	55.7%
ECO100725	BCE106489	25%	92.8%	92.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100725	BFU105257	24%	99.2%	98.8%
ECO100725	BMA107737	26%	100%	99.6%
ECO100725	CJU100103	20%	84.4%	78.7%
ECO100725	CDF103562	24%	39.2%	22.0%
ECO100725	EBC100263	85%	91.6%	97.6%
ECO100725	ECO100725	100%	100%	100%
ECO100725	HPY101257	25%	38.4%	17.4%
ECO100725	KPN300548	85%	100%	99.6%
ECO100725	LPN101284	31%	85.6%	72.7%
ECO100725	MBV103820	48%	12.5%	37.5%
ECO100725	NGO100180	25%	25.9%	30.0%
ECO100725	NME201512	20%	76.4%	74.8%
ECO100725	PRT100140	58%	99.6%	99.2%
ECO100725	PAE200973	36%	80.6%	77.0%
ECO100725	PPU108643	31%	94.7%	96.6%
ECO100725	PSY105481	41%	39.5%	93.7%
ECO100725	SPA100202	84%	74.5%	100%
ECO100725	STY101953	90%	100%	100%
ECO100725	STM101682	90%	100%	100%
ECO100725	TPA100980	24%	35.0%	9.4%
ECO100725	VCH101804	34%	98.9%	99.6%
ECO100725	YPS002077	69%	100%	100%
EC0100741	BPT100548	42%	96.0%	93.5%
EC0100741	BFU102456	40%	51.1%	80.7%
EC0100741	BFU115706	40%	51.7%	72.2%
EC0100741	EBC103505	88%	100%	100%
EC0100741	ECO100741	100%	100%	100%
ECO100741	HIN101656	53%	99.4%	99.7%
EC0100741	KPN305280	78%	100%	99.7%
EC0100741	MCA102353	44%	57.4%	91.9%
ECO100741	PMU100742	50%	99.4%	99.7%
ECO100741	PRT105509	62%	99.7%	99.2%
EC0100741	PAE201860	43%	99.7%	99.2%
ECO100741	PPU112554	42%	95.5%	94.8%
ECO100741	PSY105309	43%	94.3%	96.3%
ECO100741	SPA101804	91%	100%	100%
ECO100741	STY102291	91%	100%	100%
ECO100741	STM102051	91%	100%	100%
ECO100741	SAU802277	38%	57.4%	99.5%
ECO100741	SEP200346	37%	58.0%	98.1%
ECO100741	SHA102072	42%	56.8%	98.5%
ECO100741	VCH103445	49%	98.6%	96.2%
ECO100741	YPS002116	70%	99.1%	97.2%
ECO100741	CAC102362	27%	28.8%	40.8%
ECO100748	EBC103508	79%	100%	100%
ECO100748	EFM202173	28%	31.4%	45.6%
ECO100748	ECO100748	100%	100%	100%
EC0100748	KPN307027	77%	100%	100%
EC0100748	MLP100102	30%	14.1%	25.8%
EC0100748	SPA:100494	59%	58.3%	99.2%
EC0100748	SFX100494 STY102294	86%	100%	100%
ECO100748	YPS000085	25%	28.6%	34.6%
EC0100748 EC0100757	ABA104944	30%	78.1%	83.9%
ECO100757	BAN113702	42%	45.9%	72.6%
ECO100/3/	DWINITY 107	74/0	73.770	12.070

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100757	BAN111016	36%	86.3%	86.7%
ECO100757	BAN102075	36%	88.1%	87.0%
ECO100757	BAN106548	34%	100%	99.4%
EC0100757	BAN111025	34%	100%	100%
EC0100757	BFR100859	26%	46.2%	35.5%
ECO100757	BFR102551	21%	79.3%	60.3%
ECO100757	BPT101117	36%	98.2%	91.8%
ECO100757	BCE102679	33%	98.8%	92.7%
ECO100757	BFU105518	35%	91.8%	83.2%
ECO100757	BMA107904	35%	98.8%	100%
ECO100757	CJU100150	32%	92.7%	93.1%
ECO100757	CAC101752	. 31%	98.8%	100%
ECO100757	CBO102636	33%	98.8%	99.7%
ECO100757	CDF101204	29%	98.8%	100%
ECO100757	CDP101688	31%	86.0%	98.0%
ECO100757	EBC102210	89%	100%	100%
EC0100757	EFA202347	33%	98.8%	100%
ECO100757 ECO100757	ECO100757	100%	100%	100%
	HIN101641	61%	99.4%	96.7%
ECO100757		27%		99.7%
ECO100757	HPY100755		98.8%	
ECO100757	KPN303579	87%	100%	100%
ECO100757	LMO102857	31%	98.8%	
ECO100757	MCA103672	43%	99.1%	89.5%
ECO100757	MAV105594	35%	95.1%	87.4%
ECO100757	MBV102851	33%	92.4%	83.4%
ECO100757	MTU203069	33%	92.4%	85.5%
ECO100757	PMU100625	61%	98.8%	96.1%
ECO100757	PRT104379	73%	99.1%	99.4%
ECO100757	PAE201504	35%	99.4%	99.1%
ECO100757	PPU106301	36%	93.3%	92.2%
ECO100757	PSY105427	35%	98.2%	99.7%
ECO100757	SPA102732	91%	100%	100%
ECO100757	STY102330	92%	100%	100%
ECO100757	STM102089	92%	100%	100%
ECO100757	SAU802268	33%	100%	100%
ECO100757	SEP200319	32%	100%	100%
ECO100757	SHA101565	32%	100%	100%
ECO100757	SMU100479	23%	57.1%	50.4%
ECO100757	VCH101005	63%	100%	98.5%
ECO100757	YPS002149	78%	99.1%	99.4%
ECO100777	BPT102988	35%	92.2%	95.2%
ECO100777	BCE112934	54%	97.8%	95.4%
ECO100777	CAC102641	28%	89.2%	90.0%
ECO100777	ECO100777	100%	100%	100%
ECO100777	KPN303263	70%	99.7%	100%
ECO100777	PAE201251	32%	65.9%	69.8%
ECO100777	PPU110335	35%	67.0%	69.8%
ECO100784	BAN110623	55%	5.5%	81.1%
ECO100784	BAN108902	30%	31.7%	84.3%
ECO100784	BCE100234	33%	41.2%	84.5%
ECO100784	BFU111584	27%	72.5%	65.4%
ECO100784	CAC100165	28%	33.0%	88.1%
ECO100784	CBO103029	25%	28.4%	75.8%
ECO100784	CDP101252	. 28%	27.1%	60.3%

TO 02/07/100	** 1 * T	T1(1)		TI
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100784	EBC100646	89%	49.1% 32.6%	82.4%
ECO100784	EFA201399	30%		100%
ECO100784	ECO100784	100%	100%	99.2%
ECO100784	KPN306689	80%	92.6%	
ECO100784	LMO100404	28%	34.0%	92.2%
ECO100784	MAV104987	26%	33.8%	85.6%
ECO100784	MBV105868	27%	33.6%	89.3%
ECO100784	MTU203064	27%	33.6%	89.3%
ECO100784	PAE205116	23%	93.9%	97.8%
ECO100784	PPU108041	24%	92.6%	98.6%
ECO100784	PSY102229	25%	60.8%	77.4%
ECO100784	SPA100728	92%	34.9%	100%
ECO100784	STY102372	85%	94.3%	100%
ECO100784	SAU800361	30%	32.1%	87.7%
ECO100784	SEP201337	28%	32.1%	88.3%
ECO100784	SHA102218	31%	32.6%	89.1%
ECO100784	SMU101383	28%	29.4%	79.6%
ECO100784	SPN401595	29%	19.8%	79.6%
ECO100784	SPY201460	30%	28.2%	77.9%
ECO100785	BPT102642	71%	100%	99.2%
ECO100785	BCE104102	70%	100%	99.2%
ECO100785	BFU108289	57%	99.6%	86.0%
ECO100785	BMA103265	70%	100%	99.2%
ECO100785	CJU100833	51%	99.6%	98.8%
ECO100785	CAC102217	57%	99.2%	97.1%
ECO100785	CBO101000	56%	99.6%	92.3%
ECO100785	EBC100550	93%	61.2%	100%
ECO100785	EFA200968	56%	97.9%	95.9%
ECO100785	ECO100785	100%	100%	100%
ECO100785	KPN303595	93%	100%	100%
ECO100785	LPN103564	38%	98.8%	98.2%
ECO100785	SPA101969	91%	100%	100%
ECO100785	STY102373	95%	100%	100%
ECO100785	SHA100687	54%	93.3%	99.6%
ECO100785	SMU100131	57%	99.2%	96.7%
ECO100785	SPN400728	56%	99.6%	98.0%
ECO100785	YPS000346	83%	100%	100%
ECO100786	BAN105137	37%	93.2%	98.5%
ECO100786	BAN106432	38%	93.6%	87.8%
ECO100786	BCE107126	60%	100%	92.8%
ECO100786	BMA105276	60%	100%	100%
ECO100786	CJU100870	37%	97.3%	80.8%
ECO100786	EBC100624	93%	100%	100%
ECO100786	EFA201954	37%	97.3%	42.3%
ECO100786	EFM202037	33%	94.1%	94.9%
ECO100786	ECO100786	100%	100%	100%
ECO100786	HPY101152	27%	99.1%	98.2%
ECO100786	KPN303596	94%	100%	100%
ECO100786	LMO100160	38%	95.4%	42.7%
ECO100786	NGO100237	38%	98.2%	97.6%
ECO100786	NME201568	38%	98.2%	97.6%
ECO100786	PRT102830	34%	91.8%	79.1%
ECO100786	PAE205070	43%	95.0%	63.8%
				
ECO100786	PPU106787	45%	95.0%	63.8%

O : T : ID	TY1 TTD	T-lantitu.	Ouemi Coverage	Homolog Coverage
Query LocusID	Homolog LocusID	Identity 39%	Query Coverage 99.1%	97.7%
ECO100786	PSY102557	95%	99.5%	100%
ECO100786	SPA101970	96%	100%	100%
ECO100786	STY102374	38%	92.2%	40.8%
ECO100786	SMU101490		92.2%	67.8%
ECO100786	SPN400409	39%		40.0%
ECO100786	SPY200205	37%	91.3%	74.8%
ECO100786	VCH103754	36%	100%	100%
ECO100786	YPS000343	83%		99.6%
ECO100791	EBC102171	80%	99.8%	<u> </u>
ECO100791	ECO100791	100%	100%	100%
ECO100791	HIN101041	29%	77.6%	82.7%
ECO100791	HIN100985	31%	91.8%	92.5%
ECO100791	KPN301162	77%	98.7%	100%
ECO100791	LPN101642	24%	33.8%	27.8%
ECO100791	NGO100602	42%	24.3%	72.7%
ECO100791	NME101282	34%	86.1%	83.6%
ECO100791	PRT100704	35%	93.7%	95.3%
ECO100791	SPA102068	80%	74.6%	100%
ECO100791	STY102390	83%	99.8%	100%
ECO100798	ABA103859	41%	99.3%	99.6%
ECO100798	CBO103381	29%	94.8%	97.0%
ECO100798	CDF100774	31%	96.3%	98.5%
ECO100798	CDP100194	28%	97.0%	98.5%
ECO100798	EBC101153	80%	99.6%	100%
ECO100798	ECO100798	100%	100%	100%
ECO100798	KPN302749	81% .	100%	100%
ECO100798	LMO102831	36%	98.5%	99.6%
ECO100798	MGE100271	23%	93.7%	96.0%
ECO100798	SPA100708	88%	99.3%	100%
ECO100798	STY102396	88%	99.3%	100%
ECO100798	STM102169	88%	99.3%	100%
ECO100798	SAU802525	36%	95.2%	97.4%
ECO100798	SEP201092	35%	96.3%	97.4%
ECO100798	SMU100886	36%	97.0%	98.5%
ECO100798	SPN401305	33%	97.4%	98.9%
ECO100798	SPY200407	29%	96.3%	99.6%
ECO100799	EBC101152	92%	94.0%	100%
ECO100799	ECO100799	100%	100%	100%
ECO100799	KPN302752	92%	100%	100%
ECO100799	SPA100176	95%	39.5%	99.1%
EC0100799	STY102397	95%	100%	100%
ECO100799	SMU101536	50%	99.0%	97.1%
ECQ100799	SPN400232	50%	99.9%	98.7%
ECO100799	SPY201569	53%	99.0%	98.6%
ECO100808	BAN100561	50%	91.1%	100%
ECO100808	BAN104237	51%	91.1%	92.0%
ECO100808	BPT101723	71%	92.7%	94.0%
ECO100808	BCE106581	76%	93.4%	95.3%
ECO100808	BFU105826	76%	95.4%	96.3%
ECO100808	BMA100352	76%	93.4%	93.7%
ECO100808	CDP100606	41%	87.8%	98.2%
EC0100808	EBC102792	87%	100%	100%
	100104/74	0/70	10070	
ECO100808	ECO100808	100%	100%	100%

0 02/07/103			,	1 C 17 C 302/05107
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100808	LPN102009	30%	71.9%	53.3%
ECO100808	MAV102744	36%	90.1%	93.8%
ECO100808	MBV101586	35%	90.1%	95.1%
ECO100808	MTU203610	36%	85.5%	97.4%
ECO100808	SPA101182	90%	100%	100%
ECO100808	STY102416	91%	100%	100%
ECO100808	STM102205	91%	100%	100%
ECO100808	SAU800207	37%	90.8%	70.8%
ECO100808	SPY201539	33%	74.6%	83.2%
ECO100809	ECO100809	100%	100%	100%
ECO100809	MCA102378	23%	13.9%	50.8%
ECO100809	SAU802073	32%	6.0%	9.9%
ECO100810	CAC100997	29%	36.0%	63.8%
ECO100810	CAC102604	28%	51.8%	91.3%
EC0100810	ECO100810	100%	100%	100%
EC0100810	ABA101330	68%	98.4%	98.2%
EC0100811	BFR102640	38%	97.3%	98.1%
EC0100811	BPT100744	73%	98.4%	99.1%
EC0100811	BCE106919	64%	98.6%	99.6%
EC0100811	BFU100161	64%	97.7%	100%
EC0100811 EC0100811	BMA105812	62%	97.7%	97.4%
	CJU101372	34%	95.2%	95.2%
ECO100811		37%	99.1%	87.9%
ECO100811	CPN200500	36%	97.5%	97.3%
ECO100811	CAC101960			
ECO100811	CBO102372	38%	97.5%	97.3%
ECO100811	CDF100866	39%	97.5%	98.0%
ECO100811	EBC102793	96%	100%	100%
ECO100811	ECO100811	100%	100%	100%
ECO100811	HPY100722	30%	95.0%	94.8%
ECO100811	KPN302759	94%	100%	100%
ECO100811	LPN100817	60%	42.0%	100%
ECO100811	MCA100109	62%	99.3%	86.8%
ECO100811	PMU101571	75%	98.4%	98.7%
ECO100811	PRT105016	87%	100%	99.5%
ECO100811	PAE200915	73%	99.1%	99.5%
ECO100811	PPU104571	71%	100%	100%
ECO100811	PSY104389	70% .	91.6%	98.8%
ECO100811	SPA101181	97%	100%	100%
ECO100811	STY102418	97%	100%	100%
ECO100811	SPY200723	31%	16.8%	28.5%
ECO100811	VCH102583	77%	97.7%	91.7%
ECO100836	CPN200269	31%	88.5%	83.4%
ECO100836	CTR200650	29%	91.8%	86.1%
ECO100836	EBC100514	87%	100%	93.8%
ECO100836	ECO100836	100%	100%	100%
ECO100836	HPY101155	24%	84.4%	73.6%
ECO100836	KPN302146	87%	100%	98.0%
ECO100836	LPN100743	23%	99.2%	96.0%
ECO100836	LPN103487	27%	97.5%	98.3%
ECO100836	LPN102814	33%	94.7%	95.2%
ECO100836	LPN101937	26%	98.4%	97.6%
ECO100836	LPN103612	32%	97.5%	99.2%
ECO100836	MCA100559	35%	90.9%	84.4%
ECO100836	MCA102170	36%	95.5%	91.7%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100836	MCA100560	36%	92.6%	83.1%
ECO100836	PAE205148	42%	99.2%	96.4%
ECO100836	PPU109095	43%	89.3%	97.7%
ECO100836	SPA102374	91%	97.5%	100%
ECO100836	STY102490	91%	100%	100%
ECO100836	SEP100077	33%	90.1%	79.3%
ECO100836	SMU100993	32%	91.8%	82.7%
ECO100838	EBC104449	92%	75.2%	100%
ECO100838	ECO100838	100%	100%	100%
ECO100838	HIN101151	55%	95.4%	94.1%
ECO100838	KPN301800	91%	99.6%	99.6%
ECO100838	PMU100125	55%	95.4%	94.2%
ECO100838	PRT100750	67%	100%	100% .
ECO100838	SPA100500	91%	45.4%	100%
ECO100838	STY102492	94%	99.6%	99.6%
ECO100838	VCH103478	53%	92.9%	89.1%
ECO100838	YPS001173	79%	100%	100%
ECO100844	BAN111580	48%	8.9%	77.5%
ECO100844	BAN100129	33%	66.2%	83.3%
ECO100844	BAN113145	35%	94.0%	98.8%
ECO100844	BFR13634	23%	95.4%	99.1%
ECO100844	EBC102012	88%	96.0%	100%
ECO100844	ECO100844	100%	100%	100%
ECO100844	KPN300042	88%	43.6%	96.2%
ECO100844	KPN301813	89%	96.6%	100%
ECO100844	LPN103633	35%	93.1%	97.6%
ECO100844	MAV100805	25%	92.6%	89.6%
ECO100844	MBV104384	23%	92.0%	88.1%
ECO100844	MTU201091	23%	92.0%	88.1%
ECO100844	PAE204359	31%	95.4%	99.7%
ECO100844	PPU101560	29%	94.0%	97.9%
ECO100844	PSY101773	30%	94.0%	97.9%
ECO100844	SPA100744	84%	100%	100%
ECO100844	STY102502	93%	96.6%	100%
ECO100844	SMU100712	25%	94.8%	95.1%
ECO100844	YPS002695	44%	94.3%	97.3%
ECO100844	YPS001180	73%	95.7%	99.1%
ECO100848	BCE111932	31%	95.0%	89.3%
ECO100848	BFU111768	29%	94.7%	88.1%
ECO100848	BMA108604	31%	95.0%	89.2%
ECO100848	CAC101222	26%	58.7%	70.5%
ECO100848	CBO101327	21%	65.5%	79.2%
ECO100848	CDF103953	36%	19.9%	9.8%
ECO100848	CDP100938	27%	88.5%	76.3%
ECO100848	EBC102313	. 86%	100%	100%
ECO100848	ECO100848	100%	100%	100%
ECO100848	KPN301808	89%	100%	100%
ECO100848	LPN100990	29%	96.6%	53.9%
ECO100848	MBV101709	28%	78.9%	68.7%
ECO100848	MTU203187	28%	78.9%	68.7%
ECO100848	PRT102449	55%	100%	100%
ECO100848	PAE205406	30%	94.7%	92.6%
ECO100848	PPU107514	27%	94.1%	91.6%
ECQ100848	PSY102789	27%	95.7%	93.4%

W U U2/U / / 183	T	Tara di		FC1/USU2/U910/
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100848	SPA100209	87%	95.7%	100%
ECO100848	STY102872	89%	100%	97.4%
ECO100848	YPS001188	59%	99.1%	
ECO100850	ABA101625	29%	92.7%	97.4%
ECO100850	BFR105073	28%	60.3%	97.1%
ECO100850	BFR10379	34%	60.3%	97%
ECO100850	CBO100922	37%	54.0%	86.9%
ECO100850	EBC102315	84%	94.9%	100%
ECO100850	ECO100850	100%	100%	100%
ECO100850	HIN101420	47%	60.3%	97.4%
ECO100850	KPN301812	82%	94.9%	100%
ECO100850	MCA102941	38%	93.7%	97.4%
ECO100850	NGO101297	39%	93.3%	97%
ECO100850	NME201609	39%	93.7%	97.3%
ECO100850	PMU100465	45%	94.9%	99.0%
ECO100850	PRT103160	59%	94.9%	100%
ECO100850	SPA100944	88%	94.9%	100%
ECO100850	STY102874	88%	94.9%	100%
ECO100850	VCH101132	52%	94.3%	98.3%
ECO100850	YPS001192	71%	94.6%	100%
ECO100851	ABA105899	66%	98.7%	99.1%
ECO100851	BAN110789	36%	95.2%	98.6%
ECO100851	BAN100809	43%	98.7%	46.2%
ECO100851	BCE113237	66%	99.1%	93.1%
ECO100851	BFU108967	66%	99.1%	89.6%
ECO100851	BMA109080	70%	95.7%	94.4%
ECO100851	CDF103952	26%	60.2%	46.6%
ECO100851	EBC102316	89%	100%	100%
ECO100851	EFA200743	45%	99.1%	99.5%
ECO100851	ECO100851	100%	100%	100%
ECO100851	KPN301409	90%	72.7%	94.4%
ECO100851	PAE204031	71%	99.1%	99.6%
ECO100851	PPU107265	69%	98.3%	97.0%
ECO100851	SPN401602	37%	97.4%	97.7%
ECO100852	BFU100163	23%	79.7%	75.4%
ECO100852	CBO101403	24%	31.7%	26.2%
ECO100852	EBC102317	84%	92.9%	100%
ECO100852	ECO100852	100%	100%	100%
ECO100852	KPN301415	86%	100%	100%
ECO100852	PMU100466	38%	99.3%	99.8%
ECO100852	PRT101841	55%	100%	100%
ECO100852	PPU100582	20%	79.7%	70.3%
ECO100852	PSY101212	22%	79.7%	72.5%
ECO100852	SPA101097	82%	61.6%	100%
ECO100852	STY102875	89%	100%	100%
ECO100852 ECO100852	STM102673	89%	100%	100%
ECO100852	VCH103268	43%	99.5%	97.7%
ECO100852	YPS001193	64%	100%	99.8%
EC0100852 EC0100867	ABA105367	43%	95.5%	99.5%
EC0100867	BAN106540	36%	80.5%	98.4%
EC0100867	BAN100340 BAN103047	39%	95.7%	97.9%
EC0100867	BFR11901	44%	95.5%	99.5%
EC0100867	BPT102656	54%	98.0%	98.2%
EC0100867	BCE114975			96.8%
ECO100901	DCE1149/3	54%	95.7%	70.0%

0002/07/100				1 € 1/0502/05107
Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100867	BFU101858	54%	93.1%	99.5%
ECO100867	BMA110026	54%	95.7%	96.8%
ECO100867	CJU100186	32%	84.8%	89.3%
ECO100867	CAC102995	47%	94.6%	94.8%
ECO100867	CBO100306	35%	91.9%	96.4%
ECO100867	CDF100879	35%	94.0%	96.5%
ECO100867	CDP100385	44%	95.5%	92.9%
ECO100867	EBC101259	94%	100%	100%
ECO100867	EFA202198	38%	91.5%	94.8%
ECO100867	EFM200319	38%	96.0%	92.4%
ECO100867	ECO100867	100%	100%	100%
ECO100867	HIN101557	73%	100%	100%
ECO100867	HPY101009	31%	84.8%	90.0%
ECO100867	KPN301123	95%	99.8%	100%
ECO100867	LPN101679	50%	87.5%	97.7%
ECO100867	LMO100087	37%	93.7%	99.1%
ECQ100867	MCA101668	45%	90.2%	94.9%
ECO100867	MAV102138	44%	93.3%	90.4%
ECO100867	MBV100989	42%	95.1%	92.7%
ECO100867	MLP100308	42%	94.2%	87.5%
ECO100867	MTU202522	42%	95.1%	92.7%
ECO100867	NGO101204	54%	95.5%	96.6%
ECO100867	NME201305	54%	96.6%	97.7%
ECO100867	PMU100257	73%	99.8%	100%
ECO100867	PRT102616	85%	100%	97.8%
ECO100867	PAE202611	60%	97.8%	98.2%
ECO100867	PPU100863	59%	97.8%	98.2%
ECO100867	PSY104188	60%	96.6%	97.3%
ECO100867	SPA103469	95%	99.8%	100%
ECO100867	STY102895	97%	100%	100%
ECO100867	STM102717	97%	100%	100%
ECO100867	SAU801627	36%	90.6%	94.1%
ECO100867	SEP201572	35%	90.6%	94.3%
EC0100867	SHA100667	39%	38.0%	76.4%
ECO100867	SMU100656	36%	91.1%	95.0%
ECO100807 ECO100867	SPN401614	36%	91.1%	94.6%
ECO100867	SPY201532	37%	91.1%	94.8%
ECO100867	UUR100196	31%	91.3%	95.1%
ECO100867	VCH101089	73%	99.8%	99.6%
	YPS001228	86%	100%	100%
ECO100867	ABA101808	66%	99.8%	99.8%
ECO100868			96.0%	96.7%
ECO100868	BAN101821	48%		98.8%
ECO100868	BAN102446	52%	98.8%	
ECO100868	BFR104902	40%	98.1%	98.3%
ECO100868	BPT102654	55%	99.1%	98.9%
ECO100868	BBU100225	33%	99.8%	99.1%
ECO100868	BCE111542	55%	50.7%	98.2%
ECO100868	BFU101860	62%	99.3%	98.4%
ECO100868	BMA100713	62%	99.8%	98.4%
ECO100868	CJU100357	47%	98.1%	99.8%
ECO100868	CPN200980	40%	99.8%	98.8%
ECO100868	CTR200102	40%	99.8%	98.6%
ECO100868	CAC102168	46%	98.4%	98.6%
ECO100868	CBO103963	48%	99.8%	99.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100868	CDF100043	49%	24.0%	90.6%
ECO100868	CDF100480	48%	98.4%	98.6%
ECO100868	CDF100128	47%	98.4%	98.6%
ECO100868	CDP100672	38%	98.4%	97.9%
ECO100868	EBC101260	92%	100%	100%
ECO100868	EFA202450	52%	99.8%	99.8%
ECO100868	EFA200752	53%	99.8%	99.8%
ECO100868	EFM202627	51%	99.8%	99.8%
ECO100868	ECO100868	100%	100%	100%
ECO100868	HIN100109	77%	100%	99.8%
ECO100868	HPY101459	47%	98.4%	100%
ECO100868	KPN301832	95%	74.4%	100%
ECO100868	LPN101085	58%	99.8%	99.3%
ECO100868	LMO102194	51%	99.8%	99.1%
ECO100868	MCA100776	60%	99.8%	99.8%
	MAV103250	37%	98.4%	97.2%
ECO100868	MBV105246	36%	99.8%	99.0%
ECO100868	MLP100058	34%	98.4%	97.8%
ECO100868 ECO100868	MTU203779	36%	99.8%	99.0%
		38%	98.6%	98.8%
ECO100868	MGE100005		98.6%	98.1%
ECO100868	MPN100149	38%		
ECO100868	NGO100535	64%	99.1%	98.6%
ECO100868	NME201792	64%	99.1%	98.6%
ECO100868	PMU100258	77%	100%	100%
ECO100868	PRT102618	81%	100%	100%
ECO100868	PAE202610	65%	100%	100%
ECO100868	PPU100866	67%	99.8%	99.8%
ECO100868	PSY104164	66%	100%	100%
ECO100868	SPA103470	95%	100%	100%
ECO100868	STY102896	97%	100%	100%
ECO100868	STM102719	97%	100%	100%
ECO100868	SAU800009	51%	98.8%	97.9%
ECO100868	SEP201273	53%	98.8%	97.9%
ECO100868	SHA102263	52%	98.8%	97.9%
ECO100868	SMU101313	55%	99.8%	99.1%
ECO100868	SPN400372	55%	99.8%	94.8%
ECO100868	SPY201341	56%	98.8%	98.4%
ECO100868	TPA100639	33%	99.8%	98.8%
ECO100868	UUR100105	47%	98.4%	99.8%
ECO100868	VCH101091	71%	100%	100%
ECO100868	YPS001230	84%	100%	100%
ECO100869	BCE108240	28%	92.4%	98.1%
ECO100869	BFU105642	27%	96.1%	98.7%
ECO100869	.EBC101397	90%	96.3%	100%
ECO100869	ECO100869	100%	100%	100%
ECO100869	HIN101025	74%	100%	97.4%
ECO100869	KPN301830	89%	100%	96.4%
ECO100869	PMU101754	74%	100%	93.5%
ECO100869	PRT105822	80%	99.6%	100%
ECO100869	SPA103471	90%	99.9%	97.9%
ECO100869	STY102898	92%	99.9%	96.3%
ECO100869	STM103286	93%	99.9%	96.3%
ECO100869	YPS000005	82%	99.9%	96.3%
ECO100875	BCE105376	36%	99.7%	96.5%